

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN**

NETCRAFT CORPORATION,

Plaintiff,

v.

EBAY INC., and
PAYPAL, INC.

Defendants.

07 C 0254 C
Civil Action No. _____

JURY TRIAL DEMANDED

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Netcraft Corporation files this Complaint and demand for jury trial seeking relief for patent infringement by the Defendants. Netcraft Corporation states and alleges the following:

THE PARTIES

1. Plaintiff Netcraft Corporation ("Netcraft") is a corporation organized and existing under the laws of the state of Delaware.
2. Defendant eBay Inc. ("eBay") is a corporation organized and existing under the laws of the state of Delaware with its principal place of business at 2145 Hamilton Avenue, San Jose, CA 95125.
3. Defendant PayPal, Inc. ("PayPal") is a corporation organized and existing under the laws of the state of Delaware with its principal place of business at 2211 North First Street, San Jose, CA 95131.
4. Defendant PayPal is a subsidiary of eBay.

JURISDICTION AND VENUE

5. This is an action for patent infringement arising under the patent laws of the United States, 35 U.S.C. §§ 1 *et seq.* This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).

6. This Court has personal jurisdiction over each of the Defendants because each Defendant regularly conducts business in the State of Wisconsin and therefore has substantial and continuous contacts within this judicial district; because each Defendant has purposefully availed itself to the privileges of conducting business in this judicial district; and/or because each Defendant has committed acts of patent infringement in this judicial district.

7. Venue is proper in this District pursuant to 28 U.S.C. §§ 1391(b) and (c) and 1400(b).

COUNT I
(Patent Infringement)

8. Netcraft restates and realleges the preceding paragraphs of this Complaint.

9. On February 26, 2002, United States Patent No. 6,351,739 (“the ’739 patent”) titled “Internet billing method” was issued by the United States Patent and Trademark Office. Netcraft owns the ’739 patent by assignment. A true and correct copy of the ’739 patent is attached as Exhibit A.

10. On December 13, 2005, United States Patent No. 6,976,008 (“the ’008 patent”) entitled “Internet billing method” was issued by the United States Patent and Trademark Office. The United States Patent and Trademark Office issued a certificate of correction on May 9, 2006 and on February 13, 2007. Netcraft owns the ’008 patent by assignment. A true and correct copy of the ’008 patent is attached as Exhibit B.

11. Defendants have been and are infringing, actively inducing others to infringe, and/or contributing to the infringement of the '739 and '008 patents by making, using, selling, offering to sell, and providing their billing and payment products and/or services.

12. Upon information and belief, Defendants have been and are infringing the '739 and '008 patents with knowledge of one or more of the patents, and thus Defendants' infringement is willful.

13. Upon information and belief, Defendants will continue to infringe the '739 and '008 patents unless and until they are enjoined by this Court.

14. The Defendants have caused and will continue to cause Netcraft irreparable injury and damage by infringing the '739 and '008 patents. Netcraft will suffer further irreparable injury, for which it has no adequate remedy at law, unless and until the Defendants are enjoined from infringing the '739 and '008 patents.

PRAYER FOR RELIEF

WHEREFORE, Netcraft respectfully requests that this Court:

- (1) Enter judgment that Defendants have infringed the '739 and '008 patents;
- (2) Enter an order permanently enjoining Defendants and their officers, agents, employees, attorneys, and all persons in active concert or participation with any of them, from infringing the '739 and '008 patents;
- (3) Award Netcraft damages in an amount sufficient to compensate it for Defendants' infringement of the '739 and '008 patents, together with prejudgment and post-judgment interest and costs under 35 U.S.C. § 284;
- (4) Treble the damages awarded to Netcraft under 35 U.S.C. § 284 by reason of Defendants' willful infringement of the '739 and '008 patents;

(5) Declare this case to be “exceptional” under 35 U.S.C. § 285 and award Netcraft its attorney fees, expenses, and costs incurred in this action; and

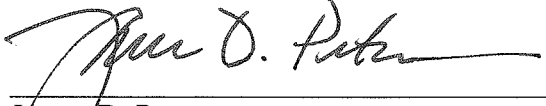
(6) Award Netcraft such other and further relief as this Court deems just and proper.

JURY TRIAL DEMAND

Netcraft demands a trial by jury on all issues appropriately triable by a jury.

Dated: May 3, 2007

GODFREY & KAHN, S.C.

By: 
James D. Peterson
James A. Friedman
One East Main Street, Suite 500
P.O. Box 2719
Madison, WI 53701-2719
Tel: (608) 257-3911
Fax: (608) 257-0609

Frank E. Scherkenbach
FISH & RICHARDSON P.C.
225 Franklin Street
Boston, MA 02110
Tel: (617) 542-5070
Fax: (617) 542-8906

William R. Woodford
Joshua H. Bleet
FISH & RICHARDSON P.C.
3300 Dain Rauscher Plaza
60 South Sixth Street
Minneapolis, MN 55402
Tel: (612) 335-5070
Fax: (612) 288-9696

Attorneys for Plaintiff
NETCRAFT CORPORATION



US006351739B1

(12) **United States Patent**
Egendorf

(10) Patent No.: **US 6,351,739 B1**(45) Date of Patent: **Feb. 26, 2002**(54) **INTERNET BILLING METHOD**(75) Inventor: **Andrew Egendorf, Lincoln, MA (US)**(73) Assignee: **Netercraft Corporation, Lincoln, MA (US)**

JP	5-014510	1/1993
JP	6-291889	10/1994
JP	7-056888	3/1995
WO	WO 00/67170	* 10/1996
WO	WO 97/41586	11/1997
WO	WO 98/19260	* 5/1999

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

OTHER PUBLICATIONS

Marrinan, M., "First Union, Open Market Hit the Internet", Bank System+Technology; New York; vol. 2, No. 5; (May 1995).*

(21) Appl. No.: **09/568,925**(22) Filed: **May 11, 2000**

(List continued on next page.)

Related U.S. Application Data

(63) Continuation of application No. 09/057,230, filed on Apr. 8, 1998, which is a continuation of application No. 08/499,535, filed on Jul. 7, 1995, now Pat. No. 5,794,221.

(51) Int. Cl.⁷ **G06F 17/60**(52) U.S. Cl. **705/40; 705/41; 705/42; 235/380; 235/379**(58) Field of Search **705/40, 41, 42; 235/380, 379; 379/127**(56) **References Cited****U.S. PATENT DOCUMENTS**

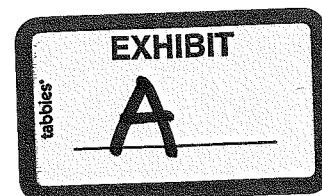
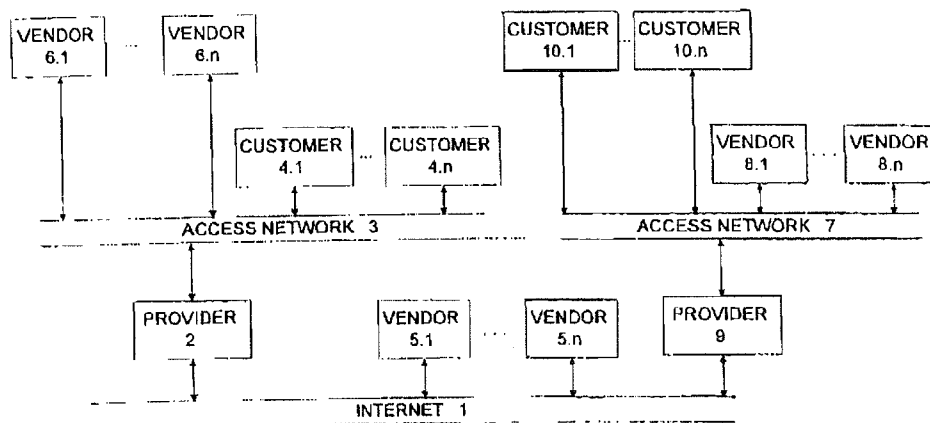
3,652,795 A	*	3/1972	Wolf et al.	179/2
5,146,491 A		9/1992	Silver et al.	379/114
5,283,731 A	*	2/1994	Lalonde et al.	364/401
5,446,489 A		8/1995	Egendorf	348/3
5,590,197 A		12/1996	Chen et al.	380/24
5,724,424 A		3/1998	Gifford	380/24
5,727,163 A		3/1998	Bezos	395/227
5,729,594 A	*	3/1998	Klingman	379/93.12
5,745,556 A	*	4/1998	Ronen	379/127
5,819,092 A		10/1998	Ferguson et al.	395/201
5,822,737 A	*	10/1998	Ogram	705/26
5,826,241 A		10/1998	Stein et al.	705/26

FOREIGN PATENT DOCUMENTS

EP 0913 789 A * 10/1997

Primary Examiner—Vincent Millin*Assistant Examiner*—Daniel Felton(74) *Attorney, Agent, or Firm*—Ira J. Schaefer; Clifford Chance Rogers & Wells(57) **ABSTRACT**

An Internet billing method comprises establishing an agreement between an Internet access provider and a customer, and an agreement between the Internet access provider and a vendor, wherein the Internet access provider agrees with the customer and the vendor to bill the customer and remit to the vendor for products and services purchased over the Internet by the customer from the vendor. The provider creates access to the Internet for the customer. When the customer orders a product or service over the Internet from a vendor, transactional information transmitted between the customer and the vendor is also transmitted to the provider. The provider then bills the transaction amount to the customer and remits a portion of the transaction amount to the vendor, keeping the differential as a fee for providing the service. As a result of this method, there is no need for any customer account numbers or vendor account numbers to be transmitted over the Internet, thereby maintaining the security of that information.

21 Claims, 3 Drawing Sheets

US 6,351,739 B1

Page 2

OTHER PUBLICATIONS

Meece, M., "Start-Ups Offers Payment System For Data Bought Over Internet Series: 1", American Banker; New York, N.Y.; vol. 159, No. 203 (Oct. 20, 1994).*

Bowers, R., "First Virtual Creates Corporation Of Future", Newsbytes New Network, Stillwater: (Jun. 28, 1995).*

Rodriguez, K., "Cyberspace Start-ups Offer Intert Wares", InforWorld; Frammingham; (Oct. 24, 1994).*

Bowers, R., "First Virtual Offers Unique Internet Payment System", Newsbytes news Network; Still water; (Jun. 23, 1995).*

"New Line for SBA", Family and Home Office Computing, V. 12, N.4.

Cummings, "Internet Service Providers to Ride a Familiar Roller Coaster", Business Communications Review, V. 25, N. 1, pp. 67-68.

Byte, vol. 20, No. 6, Jun. 1995, Andrew Singleton, "Cash on the Wirehead", 9th Section on "First Virtual".

Interactive Age, v2, No. 8, issued Feb. 13, 1995, Dana Blankenhorn, "Building the Tools for Web Commerce" p. 34+, 'Trusted Intermediaries Section.

Credit Card Management, v7, No. 11, issued Feb., 1995, "Into the Cyberspace", p. 34+, see entire document.

Business Journal, v12, No. 40, Alex Wieggers, issued Dec. 26, 1994, "First Virtual Really Pays Bills", p. 1(2), see entire document.

First Virtual Internet Web Site, <http://www.fv.com>, download Jul. 29, 1996, authors unknown, "Information About First Virtual", esp. Payment System Summary, Buying—Complete Details and Making Sales.

First Virtual Bank of Cyberspace, Newsbytes News Network, Oct. 28, 1994, see pp. 1-2.

Paul, Database and Bulletin Board Services: A Guide to On-Line Resources, Quill, Sep. 1993, v81, n7, p. 18(3), see second and third pages.

Bremmer, Guide to Database Distribution: Legal Aspects and Model Contracts, 2nd Ed., National Federation Of Abstracting and Information Services, Chs. 3, 4 and 6.

Blankenhorn, Virtual Mall Opens in Cyberspace, Newsbytes.

Goradia et al, "NetBill 1994 Prototype", Carnegie Mellon University, 91 pages.

Knowles, Anne, "Improved Internet security enabling on-line commerce" (new services based on Secure Hypertext Transfer Protocol, Secure Sockets Layer standards).

Press, Larry, "Commercialization of the Internet", Communications of the ACM, vol. 7, No. 11, pp. 17-21.

Day, Jacqueline, "Industry players in hot pursuit of secure Internet transaction mode", Bank Systems & Technology, vol. 32, No. 1, pp. 6.

Willis, Alan. "Internet Payments—the Issues". Aslib Proceedings, vol. 47, No. 11/12, p. 241 Nov./Dec., 1995.

Sirbu, Marvin and Tygar, J.D. "NetBill: An Internet Commerce System Optimized for Network-Delivered Services". IEEE Personal Communications, vol. 2, No. 4, p. 34. Aug., 1995.

* cited by examiner

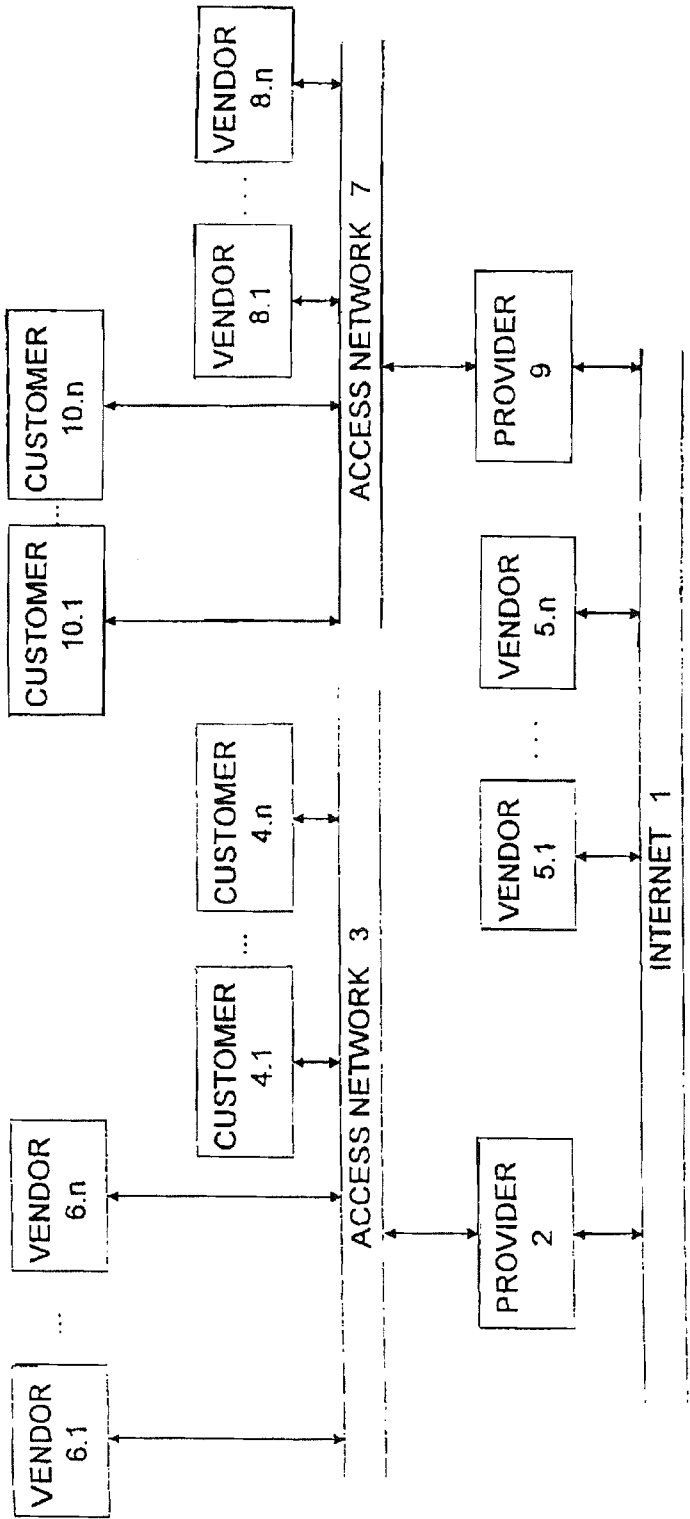


FIG. 1

U.S. Patent

Feb. 26, 2002

Sheet 2 of 3

US 6,351,739 B1

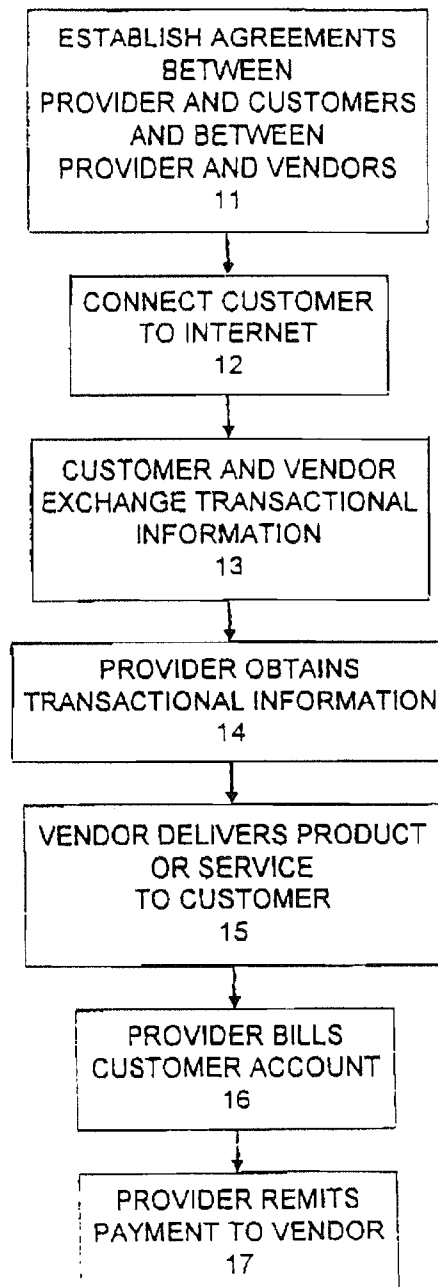


FIG. 2

U.S. Patent

Feb. 26, 2002

Sheet 3 of 3

US 6,351,739 B1

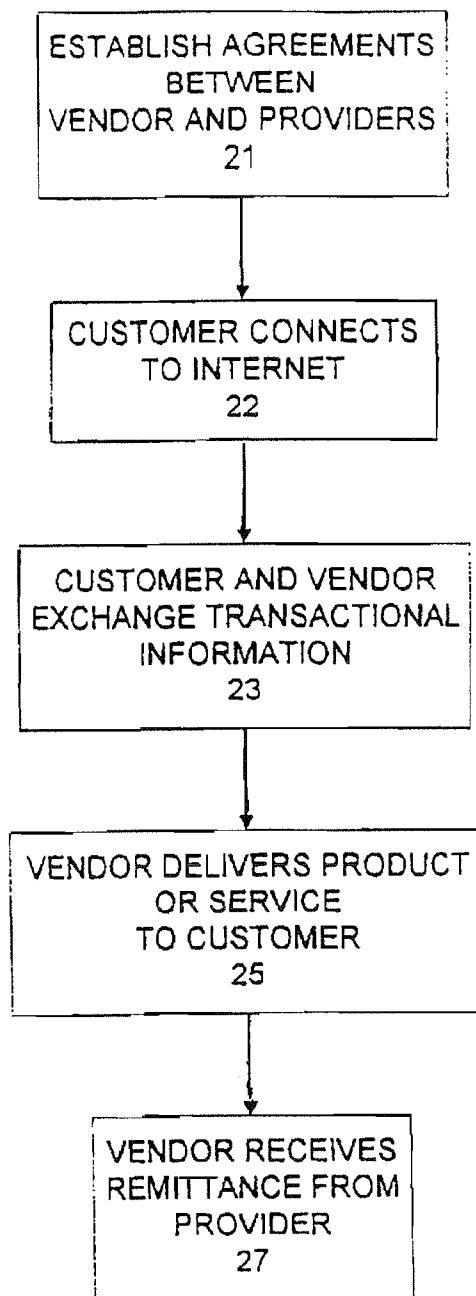


FIG. 3

US 6,351,739 B1

1

INTERNET BILLING METHOD

This application is a continuation of application Ser. No. 09/057,230, filed Apr. 8, 1998 and now pending, which is a continuation of application Ser. No. 08/499,535, filed Jul. 7, 1995 and now U.S. Pat. No. 5,794,221.

BACKGROUND OF THE INVENTION

The present invention relates to a method of billing for commercial transactions over the Internet.

The Internet is a vast worldwide interconnection of computers and computer networks. The Internet does not consist of any specific hardware or group of connected computers, rather it consists of those elements that happen to be interconnected at any particular time. The Internet has certain protocols or rules regarding signal transmission and anyone with the proper hardware and software can be part of this interconnection.

At present, the technical and financial requirements for connecting directly to the Internet are beyond the resources of most individuals and thus new businesses known as Internet access providers have proliferated. These providers invest in the equipment needed to provide access to the Internet for subscribers who pay the providers a fee for the access. Providers include companies whose only business is to offer connection to the Internet, as well as on-line services such as CompuServe, American On-Line, and Prodigy. In addition, telephone companies and cable television companies have announced plans to provide Internet access. A party desiring to connect to the Internet by means of a provider typically connects via a modem over a telephone network to the provider's equipment which then connects the party, through the provider's equipment, to the Internet.

Although the origin of the Internet was for military use, today the primary users of the Internet are civilian. There is great activity at present attempting to utilize the Internet as a channel of commerce.

Many vendors advertise their products and services over the Internet and solicit orders from Internet users for these wares. While the preferred mode of payment is by credit card, there is great reluctance to transmit credit card account information over the Internet because of lack of security. Moreover, in situations wherein the transaction amount is small—from pennies to a few dollars—it is not economically feasible to use a credit card transaction. There is a need to be able to ensure that commercial transactions over the Internet are at least as secure as conventional transactions over the telephone, through the mails, and with on-line services where credit cards and/or billing accounts are used for purchases. Similarly, there is a need to be able to handle on the Internet a large number of small-sized transactions, similar to what is done by telephone companies for conventional telephone service.

The lack of security and the lack of a means to bill for small transactions are the biggest obstacles to commercial use of the Internet.

SUMMARY OF THE INVENTION

The main object of the present invention is to create a new business opportunity for telephone companies, cable television companies, existing Internet access providers, and companies offering financial services by creating a way for them to offer to their subscribers a method of securely buying and selling goods and services of any value over the Internet.

2

Another object of the present invention is an Internet billing method which is cost effective for transactions having transaction amounts ranging from pennies to a few dollars.

Still another object of the present invention is to provide a secure method of billing commercial transactions over the Internet.

A further object of the present invention is an Internet billing method which is simple to use from both the customer's point of view and that of vendors on the Internet.

Yet another object of the present invention is a billing method which can be used by a large number of existing Internet users without requiring major changes in how the users customarily behave and conduct commercial transactions.

These and other objects and advantages of the present invention are achieved by an Internet billing method in accordance with the present invention. A provider establishes an agreement with a customer, and a second agreement with a vendor, wherein the provider agrees with the customer and the vendor to bill for products and services purchased over the Internet by the customer from the vendor. Associated with the customer agreement are one or more billing accounts to which purchases may be charged. Associated with the vendor agreement are one or more methods of remitting funds to the vendor. The provider creates access to the Internet for the customer through the provider's equipment. When the customer orders a product or service over the Internet from the vendor, the provider obtains transactional information transmitted between the customer and the vendor including a transaction amount relating to the ordered product or service and the provider then bills the transaction amount to a customer billing account and remits a portion of the transaction amount to the vendor.

Which accounts are used may be specified in the agreements made between the provider and the customer and between the provider and the vendor, or may be specified in the transactional information. If specified in the transactional information, the selection of account can be made by referencing the type of account (e.g., "VISA", "phone bill"), or the position of that account on a predetermined list (e.g., "the 3rd account"), and does not require that any actual account numbers be transmitted.

By the use of this method, there is no need for the customer to transmit over the Internet any information containing any of the customer's billing account numbers thereby maintaining the security of that information.

The present invention, in a preferred embodiment, is a method of providing merchants with the ability to offer their customers secure transactions for the purchase of goods and services of any value over the Internet, without the need for the customer to transmit any credit card or other account numbers over the Internet, without the need for the customer to sign up with any additional provider of services, and without the need to change the manner in which most customers currently use the Internet.

In accordance with the present invention, a customer desiring to purchase goods and services over the Internet has prearranged access to the Internet through the services of an Internet access provider. Such providers can be, for example, companies whose only business is to offer connection to the Internet, companies which offer on-line computer services, one of which is connection to the Internet, cable television companies, or telephone companies. In arranging for access with such a provider, the customer has agreed with the provider on a method of payment which is, for example, by

US 6,351,739 B1

3

billing, or charge to a credit card, or charge to an account of the user which could be an account specific to the Internet or could be a more general account, such as an on-line computer services account, a cable television account, a telephone account, or a bank account.

Once the prearrangements have been completed, using the provider's service to connect to the Internet typically involves calling a telephone number of the provider and being automatically connected through the provider's equipment to the Internet.

Once connected to the Internet, the customer can browse around until an item is located that the customer wishes to purchase, at which time the customer will follow the instructions created by the vendor, exchange transactional information, and ultimately agree to purchase something by taking an appropriate action. In the course of making the purchase, the means of delivery of the goods or service will be established. Depending on the type of goods, delivery can be made, for example, by mail (e.g., in the case of a purchase of a book), by courier service (e.g., in the case of a purchase of flowers), or by electronic transmission over the Internet (e.g., in the case of delivery of an electronic newsletter or piece of software). The remaining element of the purchase transaction is the manner in which the customer pays the vendor.

In accordance with the present invention, the provider has made arrangements with vendors who wish to sell goods and services over the Internet to the customers of the provider. The provider agrees to do the billing associated with such sales for the vendors, and as part of the agreement, the provider and the vendor have agreed on the manner in which the provider will remit funds to the vendor. Examples of payment include payment by check, credit to the vendor's credit card merchant account, or credit to another account of the vendor's, such as the vendor's cable television account, telephone account, or bank account. The account of the vendor to be credited need not be with the provider. The arrangements that are made will depend on the vendor's desires and the capabilities of the provider. For example, if the vendor anticipates many small transactions and the provider is a telephone company, they can agree that the provider will credit the vendor's existing telephone account for amounts under some nominal amount and credit the vendor's credit card merchant account for larger amounts. If the vendor anticipates large transactions, then they may agree that the provider will pay by check or direct credit to the vendor's bank account.

In a typical transaction in accordance with the present invention, from the customer's point of view all use of the Internet appears to be conventional. Depending upon the prearrangements made between the provider and the customer and between the provider and the vendor, the customer can charge a purchase, for example, to a credit card, to a cable television account, to a telephone account or to a bank account. The account of the customer to be billed need not be with the provider. For example, the customer may be using one telephone company as an access provider and a second telephone company as a telephone service provider and the account to be billed is that with the second telephone company. The customer specifies which account is to be billed by an indication to the provider, but neither the customer nor the vendor has to transmit any account numbers over the Internet, because it is the provider, not the vendor, who submits the charge to the credit card company, the cable television company, the telephone company, or to another account of the customer, or who debits the bank account of the customer, and the provider already has been

4

given, during the course of making prearrangements with the customer and the vendor, the appropriate account numbers of both the customer and the vendor. The provider sends this information to the appropriate party, and may do so by the same secure means customarily used for similar transactions not made over the Internet.

From the vendor's point of view, the transaction is as secure as a transaction made over the telephone with a credit card. If the vendor wishes, the vendor may verify with the provider that the address supplied by the customer or shipment of the goods has been authorized by the customer in the same manner in which such verification would be made for the same transaction made over the telephone with a credit card. In addition, because such a verification does not require the transmission of any account numbers of the customer, the verification can be done over the Internet as part of the transaction transmission itself if the provider and the vendor have prearranged to do so.

From the provider's point of view, the provider is made aware that the customer has authorized the charge by monitoring the data being sent over the Internet through the provider's equipment between the customer and the vendor. This can be done, for example, by specifying a specific code which, when sent between the customer and the vendor, indicates to the provider that a transaction has been completed. When the customer has made a purchase, the provider charges the transaction amount to the agreed account of the customer and remits the agreed portion of that amount to the vendor, keeping the differential as the provider's charge for making the service available.

These and other features and advantages of the present invention will become apparent from the following detailed description of the invention with reference to the attached drawings, wherein:

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a block diagram of a system for carrying out the billing method according to the present invention;

FIG. 2 is a flow chart of one embodiment of the method according to the present invention; and

FIG. 3 is a flow chart of another embodiment of the method according to the present invention.

DETAILED DESCRIPTION OF THE INVENTION

Referring to FIG. 1, a system for carrying out the method of the present invention is shown. In that system, the Internet is shown schematically as network 1 to which providers 2, 9, vendors 5.1-5.n, 6.1-6.n and 8.1-8.n, and customers 4.1-4.n and 10.1-10.n (where n is an integer to indicate a range from one to many) are connected in different ways.

Provider 2 is connected to access network 3 and the Internet 1 and provides access to the Internet 1 for customers 4.1-4.n and vendors 6.1-6.n connected to access network 3. Access network 3 can be a telephone network, a cable television network, an on-line services network such as Compuserve, American On-Line, or Prodigy, or a private Internet access network. Similarly, provider 9 is connected to access network 7 and the Internet 1 and provides access to the Internet 1 for customers 10.1-10.n and vendors 8.1-8.n. Vendors 5.1-5.n access the Internet directly by their own equipment.

In accordance with the method shown in the flow chart of FIG. 2, for example, in step 11 provider 2 establishes agreements with vendors 5.1-5.n who are connected directly

US 6,351,739 B1

5

to the Internet, with vendors 6.1-6.n who access the Internet via access network 3 and provider 2, and with vendors 8.1-8.n who are connected to the Internet 1 via access network 7 and provider 9, to bill customers 4.1-4.n for goods and services purchased by them over the Internet from vendors 5.1-5.n, 6.1-6.n and 8.1-8.n. Provider 2 also agrees to remit a portion of the collected money back to the vendors. Provider 2 also establishes an agreement with each of customers 4.1-4.n. These agreements provide that the provider will bill the customer for goods and services purchased by them over the Internet. The billing will be done to billing accounts established in connection with the agreements. The billing accounts can be, for example, credit card accounts, telephone accounts, cable television accounts, on-line services accounts, or bank accounts. The accounts need not be with the provider if the provider has a billing agreement in place with the party with whom the account was established.

As part of the services of the provider to customers 4.1-4.n, the customer is connected to the Internet 1 in step 12 at a desired time, typically by making contact via modem. Once connected to the Internet, the customer can interface with any one of vendors 5.1-5.n, 6.1-6.n and 8.1-8.n in order to find out about products or services offered by those vendors.

When one of customers 4.1-4.n makes the decision to order a product or service from one of vendors 5.1-5.n, 6.1-6.n and 8.1-8.n, in step 13 an exchange of transactional information occurs between the customer and the vendor. This exchange may include identifying information relating to the customer, such as the customer's Internet address, information relating to the products or services to be purchased, including the transaction amount, the manner and time of delivery, and a reference number to identify the order. The vendor or the customer also can produce a verification code signifying that a transaction has been completed which can be received by provider 2.

In step 14, the transactional information is obtained by provider 2. The communication can be a separate transmission by the vendor or the customer to provider 2, or provider 2 can extract the information from the exchange of information taking place between the customer and the vendor through equipment of provider 2. Provider 2 can then send verifying information to one or both of the customer and vendor to indicate that the transaction has been approved, if approval of a third party, such as credit card company, is required. Most importantly, the entire transaction takes place without the need of communicating the customer's credit card or other account number over the Internet 1.

The product or service is delivered to the customer in step 15 and the appropriate customer account is billed by provider 2 in step 16. Provider 2 then remits the agreed payment in the appropriate manner to the vendor in step 17, keeping the differential as a service charge for the services rendered by provider 2. Steps 15, 16 and 17 may be performed in any order.

As can be seen from FIG. 1, the method according to the present invention can be carried out in many ways. For example, referring to FIG. 3, vendor 5.1 in step 21 can establish remitting agreements with provider 2 and provider 9 to remit to vendor 5.1 a portion of a transaction amount billed to the billing account of any one of customers 4.1-4.n and 10.1-10.n.

Similarly, each of vendors 6.1-6.n can establish a remitting agreement with provider 9 for transactions carried out over the Internet between each of vendors 6.1-6.n and customers 10.1-10.n.

6

A customer connects to the Internet in step 22. The customer exchanges transactional information with the vendor in step 23 and the vendor delivers a product or service to the customer in step 25, either before or after the vendor receives remittances from the provider in step 27.

In accordance with another feature of the present invention, prior to the billing of the transaction amount to the account of the customer, and after obtaining the transactional information, the provider can obtain approval from a third party to bill the transaction amount to the billing account. This is particularly true in the case where the billing account is a credit card account or a bank account. In that instance, approval must be obtained from a third party, i.e., the bank issuing the credit card or with whom the bank account was established. Where the account is with the provider, approval would be obtained from the provider itself. In a preferred embodiment of the present invention, the approval can be obtained over the Internet and most preferably during the communication between the customer and the vendor.

In accordance with a further feature of the present invention, the customer can specify a particular billing account, for example; a credit card account, a bank account, a telephone number account, a cable television account or an on-line services account at the time that the billing agreement is established with the provider. The specification can provide that one account will be used for certain transactions, and a different account for other transactions, for example, a telephone account for transactions less than \$5.00, and a bank account for transactions of at least \$5.00. Thereafter, whenever the transaction amount is to be billed, it will be billed to that specified billing account. Alternatively, the customer can specify a plurality of billing accounts, for example, an AMEX account, a VISA account, a Mastercard account at the time that the billing agreement is established. When the transactional information is communicated, it will include an identification of which of those plurality of billing accounts the customer wants billed, without, however, specifying the account number of the account. Thus the customer can merely indicate the account by the "brand" name AMEX, VISA or Mastercard or the customer can identify it as the first account, second account or third account on a list previously established with the provider.

As noted above, the billing account is not necessarily with the provider, that is, it can be with a third party such as a bank issuing a credit card, or a bank at which the customer has a bank account. Alternatively, the provider can be a first telephone company, but the billing account can be with a second telephone company and charged by the first telephone company to the telephone number account of the customer with the second telephone company, as is customarily done in connection with conventional telecommunications services.

In accordance with the invention, the remitting can be by means of sending money or by crediting a vendor account such as a credit card merchant account, a bank account, a telephone number account, a cable television account or an on-line services account.

In a preferred embodiment of the present invention, the step of establishing the remitting account comprises specifying a particular vendor account to which the portion of the transaction amount will be remitted. The specification can provide that one account will be used for certain transactions, and a different account for other transactions, for example, a telephone account for transactions less than

US 6,351,739 B1

7

\$5.00, and a bank account for transactions of at least \$5.00. In an alternative embodiment of the present invention, the step of establishing the remitting agreement comprises the vendor specifying a plurality of vendor accounts to which a portion of the transaction amount can be remitted. Thus when the transactional information is communicated, the vendor can identify which one of the plurality of vendor accounts the amount is to be remitted to without, however, specifying the specific account number.

The vendor account can be an account with the provider or an account with a third party such as a credit card merchant account, or bank account, with a bank, or a cable television account with a cable television company.

It is understood that the embodiments described hereinabove are merely illustrative and are not intended to limit the scope of the invention. It is realized that various changes, alterations, rearrangements and modifications can be made by those skilled in the art without substantially departing from the spirit and scope of the present invention.

What is claimed is:

1. An Internet billing method for a plurality of customers and a plurality of vendors of products or services for transactions over the Internet between a purchasing customer of the plurality of customers and a selling vendor of the plurality of vendors, wherein, for each purchase transaction, a transaction amount is charged to the purchasing customer, and an amount is remitted to the selling vendor, comprising the steps by a third party of:

- a) establishing a billing agreement with the purchasing customer, and a remitting agreement with the selling vendor, to bill the purchasing customer, and to remit to the selling vendor, for products and services purchased over the Internet by the purchasing customer from the selling vendor;
- b) providing a communications link through equipment of the third party between the purchasing customer and the selling vendor through which the purchasing customer obtains information from the selling vendor with respect to a purchase of a product or service by the purchasing customer from the selling vendor;
- c) obtaining at least one billing authorization for the purchase;
- d) charging the transaction amount to the purchasing customer in accordance with the billing agreement; and
- e) remitting an amount related to the purchase to the selling vendor in accordance with the remitting agreement.

2. The method according to claim 1, wherein the at least one billing authorization is obtained by the third party from a communication sent by the purchasing customer to the third party.

3. The method according to claim 1, wherein the at least one billing authorization is obtained by the third party from a communication sent by the selling vendor to the third party.

4. The method according to claim 1, wherein the at least one billing authorization is obtained by the third party extracting the approval from a communication sent through the equipment of the third party either from the purchasing customer to the selling vendor or from the selling vendor to the purchasing customer.

5. The method according to claim 1, wherein the at least one billing authorization is obtained by the third party monitoring the existence of a communication sent through the equipment of the third party either from the purchasing customer to the selling vendor or from the selling vendor to

8

the purchasing customer without extracting the approval from the communication.

6. The method according to claim 1, 2, 3, 4, or 5, wherein the third party is an Internet access provider, a cable television company, a telephone company, or a company offering financial services.

7. The method according to claim 6, wherein the communications link is over the Internet.

8. The method according to claim 6, wherein the at least one billing authorization does not include an account number to which to charge the purchasing customer.

9. The method according to claim 6, wherein the at least one billing authorization is obtained in response to only a single action being performed by the purchasing customer.

10. The method according to claim 6, wherein the at least one billing authorization is obtained over the Internet.

11. The method according to claim 6, wherein the product is a book, flowers, software, an electronic publication, or a telecommunications product or service.

12. The method according to claim 6, wherein the product or service is delivered over the Internet.

13. The method according to claim 6, wherein prior to the step of charging, the third party obtaining approval from a party other than the purchasing customer to charge the purchasing customer.

14. The method according to claim 13, wherein the party other than the purchasing customer is a credit card company, a bank, a company offering financial services, the third party, or an Internet access provider.

15. The method according to claim 13, wherein the approval is obtained over the Internet.

16. The method according to claim 6, wherein the step of charging comprises sending a bill or charging an account with a credit card company, a bank, a company offering financial services, a telephone company, a cable television company, the third party, or an Internet access provider.

17. The method according to claim 6, wherein the step of remitting comprises sending a check or crediting an account with a credit card company, a bank, a company offering financial services, a telephone company, a cable television company, the third party, or an Internet access provider.

18. The method according to claim 6, wherein only a portion of the transaction amount is remitted to the selling vendor.

19. The method according to claim 6, wherein at least one of the steps of charging and remitting is done over the Internet.

20. The method according to claim 6, wherein the step of remitting is performed before the step of charging.

21. An Internet billing method for a plurality of customers and a plurality of vendors of products or services for transactions over the Internet between a purchasing customer of the plurality of customers and a selling vendor of the plurality of vendors, wherein, for each purchase transaction, a transaction amount is charged to the purchasing customer, and an amount is remitted to the selling vendor, comprising the steps by a third party of:

- a) establishing a billing agreement with the purchasing customer, and a remitting agreement with the selling vendor, to bill the purchasing customer, and to remit to the selling vendor, for products and services purchased over the Internet by the purchasing customer from the selling vendor;

US 6,351,739 B1

9

- b) providing a communications link through equipment of the third party between the purchasing customer and the selling vendor through which the purchasing customer obtains information from the selling vendor with respect to a purchase of a product or service by the purchasing customer from the selling vendor;
- c) obtaining over the Internet at least one billing authorization for the purchase, which does not include an account number to which to charge the purchasing customer, from a communication sent by the purchas-

10

- ing customer to the third party in response to only a single action being performed by the purchasing customer;
- d) charging the transaction amount to the purchasing customer in accordance with the billing agreement; and
- e) remitting an amount related to the purchase to the selling vendor in accordance with the remitting agreement.

* * * * *



US006976008B2

(12) **United States Patent**
Egendorf

(10) Patent No.: **US 6,976,008 B2**
(45) Date of Patent: ***Dec. 13, 2005**

(54) **INTERNET BILLING METHOD**

(75) Inventor: **Andrew Egendorf, Lincoln, MA (US)**

(73) Assignee: **Netcraft, Corporation, Lincoln, MA (US)**

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 290 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **09/973,839**

(22) Filed: **Oct. 11, 2001**

(65) **Prior Publication Data**

US 2002/0032654 A1 Mar. 14, 2002

Related U.S. Application Data

(63) Continuation of application No. 09/568,925, filed on May 11, 2000, which is a continuation of application No. 09/057,230, filed on Apr. 8, 1998, now Pat. No. 6,188,994, which is a continuation of application No. 08/499,535, filed on Jul. 7, 1995, now Pat. No. 5,794,221.

(51) Int. Cl.⁷ **G06F 17/60**

(52) U.S. Cl. **705/40; 705/41; 705/42**

(58) Field of Search **705/40, 41, 42**

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,573,747 A * 4/1971 Adams 340/172.5
5,146,491 A * 9/1992 Silver et al. 379/114
5,329,589 A * 7/1994 Fraser et al. 379/91.02

5,394,324 A * 2/1995 Clearwater 705/8
5,446,489 A * 8/1995 Egendorf 348/3
5,737,414 A 4/1998 Walker et al. 380/4
5,845,265 A 12/1998 Woolston 705/37

OTHER PUBLICATIONS

Carnegie Mellon University, "Internet billing Server Prototype Scope Document IN1 Technical Report 1993-1" (Oct. 14, 1993).*

* cited by examiner

Primary Examiner—V. Millin

Assistant Examiner—Daniel S. Felten

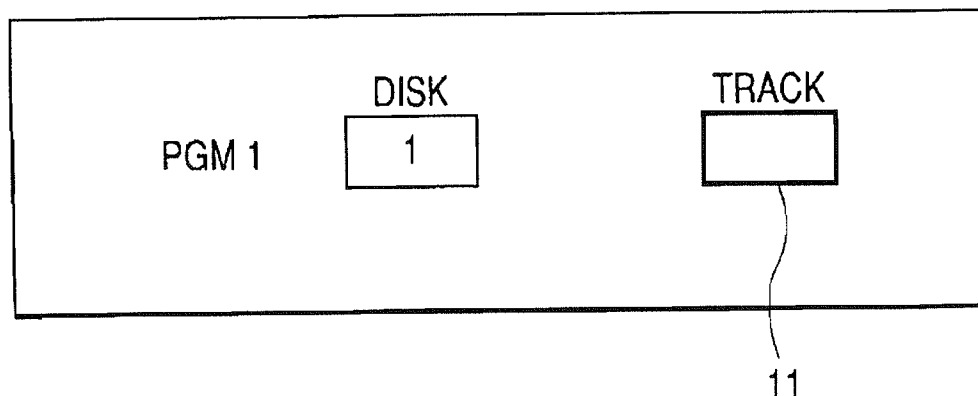
(74) Attorney, Agent, or Firm—Hogan & Hartson L.L.P.

(57) **ABSTRACT**

An Internet billing method comprises establishing an agreement between an Internet access provider and a customer, and an agreement between the Internet access provider and a vendor, wherein the Internet access provider agrees with the customer and the vendor to bill the customer and remit to the vendor for products and services purchased over the Internet by the customer from the vendor. The provider creates access to the Internet for the customer. When the customer orders a product or service over the Internet from a vendor, transactional information transmitted between the customer and the vendor is also transmitted to the provider. The provider then bills the transaction amount to the customer and remits a portion of the transaction amount to the vendor, keeping the differential as a fee for providing the service. As a result of this method, there is no need for any customer account numbers or vendor account numbers to be transmitted over the Internet, thereby maintaining the security of that information.

94 Claims, 3 Drawing Sheets

10



U.S. Patent

Dec. 13, 2005

Sheet 1 of 3

US 6,976,008 B2

FIG. 1

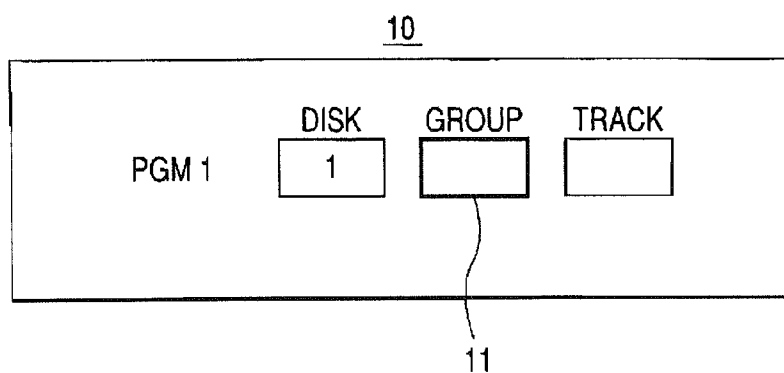


FIG. 2

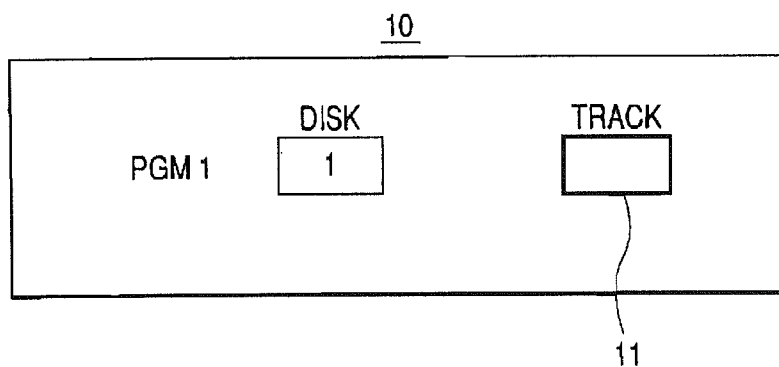
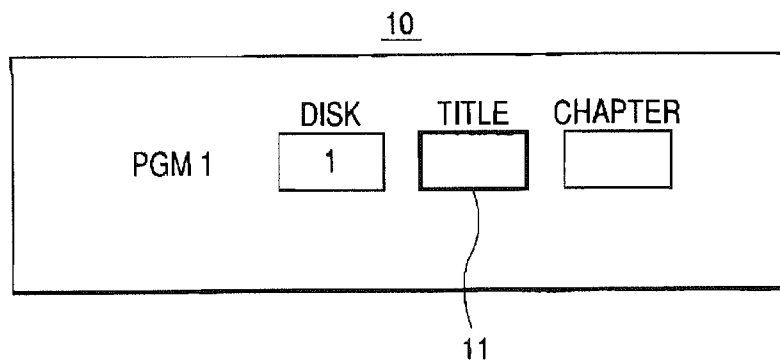


FIG. 3



U.S. Patent

Dec. 13, 2005

Sheet 2 of 3

US 6,976,008 B2

FIG. 4

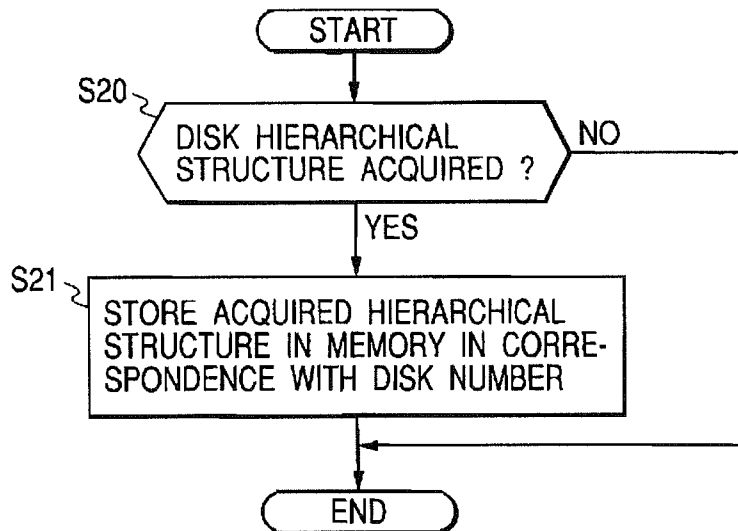
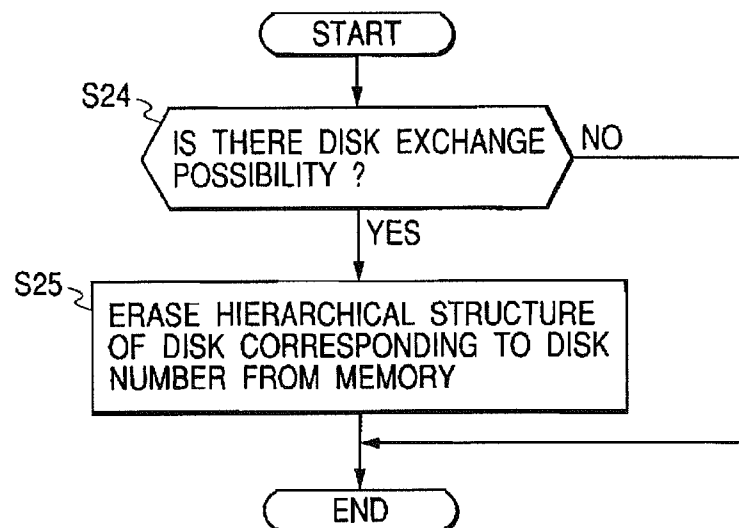


FIG. 5



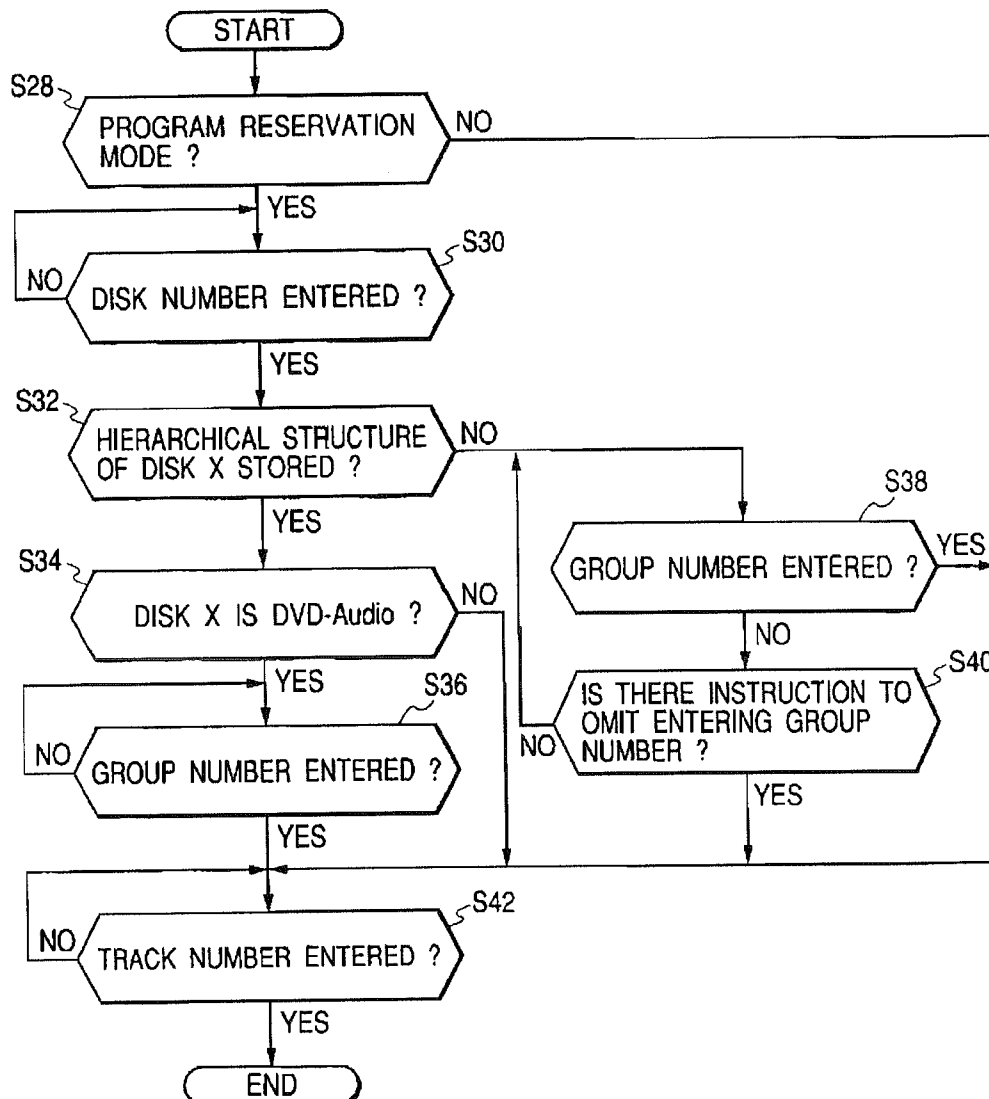
U.S. Patent

Dec. 13, 2005

Sheet 3 of 3

US 6,976,008 B2

FIG. 6



US 6,976,008 B2

1

INTERNET BILLING METHOD

This application is a continuation application of application Ser. No. 09/568,925 filed May 11, 2000 and now pending, which is a continuation of application Ser. No. 09/057,230 filed Apr. 8, 1998 now U.S. Pat. No. 6,188,994, which is a continuation of application Ser. No. 08/499,535 filed Jul. 7, 1995 now U.S. Pat. No. 5,794,221.

BACKGROUND OF THE INVENTION

The present invention relates to a method of billing for commercial transactions over the Internet.

The Internet is a vast worldwide interconnection of computers and computer networks. The Internet does not consist of any specific hardware or group of connected computers, rather it consists of those elements that happen to be interconnected at any particular time. The Internet has certain protocols or rules regarding signal transmission and anyone with the proper hardware and software can be part of this interconnection.

At present, the technical and financial requirements for connecting directly to the Internet are beyond the resources of most individuals and thus new businesses known as Internet access providers have proliferated. These providers invest in the equipment needed to provide access to the Internet for subscribers who pay the providers a fee for the access. Providers include companies whose only business is to offer connection to the Internet, as well as on-line services such as CompuServe, American On-Line, and Prodigy. In addition, telephone companies and cable television companies have announced plans to provide Internet access. A party desiring to connect to the Internet by means of a provider typically connects via a modem over a telephone network to the provider's equipment which then connects the party, through the provider's equipment, to the Internet.

Although the origin of the Internet was for military use, today the primary users of the Internet are civilian. There is great activity at present attempting to utilize the Internet as a channel of commerce.

Many vendors advertise their products and services over the Internet and solicit orders from Internet users for these wares. While the preferred mode of payment is by credit card, there is great reluctance to transmit credit card account information over the Internet because of lack of security. Moreover, in situations wherein the transaction amount is small—from pennies to a few dollars—it is not economically feasible to use a credit card transaction. There is a need to be able to ensure that commercial transactions over the Internet are at least as secure as conventional transactions over the telephone, through the mails, and with on-line services where credit cards and/or billing accounts are used for purchases. Similarly, there is a need to be able to handle on the Internet a large number of small-sized transactions, similar to what is done by telephone companies for conventional telephone services.

The lack of security and the lack of a means to bill for small transactions are the biggest obstacles to commercial use of the Internet.

SUMMARY OF THE INVENTION

The main object of the present invention is to create a new business opportunity for telephone companies, cable television companies, existing Internet access providers, and companies offering financial services by creating a way for them to offer to their subscribers a method of securely buying and selling goods and services of any value over the Internet.

2

Another object of the present invention is an Internet billing method which is cost effective for transactions having transaction amounts ranging from pennies to a few dollars.

Still another object of the present invention is to provide a secure method of billing commercial transactions over the Internet.

A further object of the present invention is an Internet billing method which is simple to use from both the customer's point of view and that of vendors on the Internet.

Yet another object of the present invention is a billing method which can be used by a large number of existing Internet users without requiring major changes in how the users customarily behave and conduct commercial transactions.

These and other objects and advantages of the present invention are achieved by an Internet billing method in accordance with the present invention. A provider establishes an agreement with a customer, and a second agreement with a vendor, wherein the provider agrees with the customer and the vendor to bill for products and services purchased over the Internet by the customer from the vendor. Associated with the customer agreement are one or more billing accounts to which purchases may be charged. Associated with the vendor agreement are one or more methods of remitting funds to the vendor. The provider creates access to the Internet for the customer through the provider's equipment. When the customer orders a product or service over the Internet from the vendor, the provider obtains transactional information transmitted between the customer and the vendor including a transaction amount relating to the ordered product or service and the provider then bills the transaction amount to a customer billing account and remits a portion of the transaction amount to the vendor.

Which accounts are used may be specified in the agreements made between the provider and the customer and between the provider and the vendor, or may be specified in the transactional information. If specified in the transactional information, the selection of account can be made by referencing the type of account (e.g., "VISA", "phone bill"), or the position of that account on a predetermined list (e.g., "the 3rd account"), and does not require that any actual account numbers be transmitted.

By the use of this method, there is no need for the customer to transmit over the Internet any information containing any of the customer's billing account numbers thereby maintaining the security of that information.

The present invention, in a preferred embodiment, is a method of providing merchants with the ability to offer customers secure transactions for the purchase of goods and services of any value over the Internet, without the need for the customer to transmit any credit card or other account numbers over the Internet, without the need for the customer to sign up with any additional provider of services, and without the need to chance the manner in which most customers currently use the Internet.

In accordance with the present invention, a customer desiring to purchase goods and services over the Internet has prearranged access to the Internet through the services of an Internet access provider. Such providers can be, for example, companies whose only business is to offer connection to the Internet, companies which offer on-line computer services, one of which is connection to the Internet, cable television companies, or telephone companies. In arranging for access with such a provider, the customer has agreed with the provider on a method of payment which is, for example, by

US 6,976,008 B2

3

billing, or charge to a credit card, or charge to an account of the user which could be an account specific to the Internet or could be a more general account, such as an on-line computer services account, a cable television account, a telephone account, or a bank account.

Once the prearrangements have been completed, using the provider's service to connect to the Internet typically involves calling a telephone number of the provider and being automatically connected through the provider's equipment to the Internet.

Once connected to the Internet, the customer can browse around until an item is located that the customer wishes to purchase, at which time the customer will follow the instructions created by the vendor, exchange transactional information, and ultimately agree to purchase something by taking an appropriate action. In the course of making the purchase, the means of delivery of the goods or service will be established. Depending on the type of goods, delivery can be made, for example, by mail (e.g., in the case of a purchase of a book), by courier service (e.g., in the case of a purchase of flowers), or by electronic transmission over the Internet (e.g., in the case of delivery of an electronic newsletter or piece of software). The remaining element of the purchase transaction is the manner in which the customer pays the vendor.

In accordance with the present invention, the provider has made arrangements with vendors who wish to sell goods and services over the Internet to the customers of the provider. The provider agrees to the billing associated with such sales for the vendors, and as part of the agreement, the provider and the vendor have agreed on the manner in which the provider will remit funds to the vendor. Examples of payment include payment by check, credit to the vendor's credit card merchant account, or credit to another account of the vendor's, such as the vendor's cable television account, telephone account, or bank account. The account of the vendor to be credited need not be with the provider. The arrangements that are made will depend on the vendor's desires and the capabilities of the provider. For example, if the vendor anticipates many small transactions and the provider is a telephone company, they can agree that the provider will credit the vendor's existing telephone account for amounts under some nominal amount and credit the vendor's credit card merchant account for larger amounts. If the vendor anticipates large transactions, then they may agree that the provider will pay by check or direct credit to the vendor's bank account.

In a typical transaction in accordance with the present invention, from the customer's point of view all use of the Internet appears to be conventional. Depending upon the prearrangements made between the provider and the customer and between the provider and the vendor, the customer can charge a purchase, or example, to a credit card, to a cable television account, to a telephone account or to a bank account. The account of the customer to be billed need not be with the provider. For example, the customer may be using one telephone company as an access provider and a second telephone company as a telephone service provider and the account to be billed is that with the second telephone company. The customer specifies which account is to be billed by an indication to the provider, but neither the customer nor the vendor has to transmit any account numbers over the Internet, because it is the provider, to the vendor, who submits the charge to the credit card company, the cable television company, the telephone company, or to another account of the customer, or who debits the bank account of the customer, and the provider already has been

4

given, during the course of making prearrangements with the customer and the vendor, the appropriate account numbers of both the customer and the vendor. The provider sends this information to the appropriate party, and may do so by the same secure means customarily used for similar transactions not make over the Internet.

From the vendor's point of view, the transaction is as secure as a transaction made over the telephone with a credit card. If the vendor wishes, the vendor may verify with the provider that the address supplied by the customer for shipment of the goods has been authorized by the customer in the same manner in which such verification would be made for the same transaction made over the telephone with a credit card. In addition, because such a verification does not require the transmission of any account numbers of the customer, the verification can be done over the Internet as part of the transaction transmission itself if the provider and the vendor have prearranged to do so.

From the provider's point of view, the provider is made aware that the customer has authorized the charge by monitoring the data being sent over the Internet through the provider's equipment between the customer and the vendor. This can be done, for example, by specifying a specific code which, when sent between the customer and the vendor, indicates to the provider that a transaction has been completed. When the customer has made a purchase, the provider charges the transaction amount to the agreed account of the customer and remits the agreed portion of that amount to the vendor, keeping the differential as the provider's charge for making the service available.

These and other features and advantages of the present invention will become apparent from the following detailed description of the invention with reference to the attached drawings, wherein:

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a block diagram of a system for carrying out the billing method according to the present invention;

FIG. 2 is a flow chart of one embodiment of the method according to the present invention; and

FIG. 3 is a flow chart of another embodiment of the method according to the present invention.

DETAILED DESCRIPTION OF THE INVENTION

Referring to FIG. 1, a system for carrying out the method of the present invention is shown. In that system, the Internet is shown schematically as network 1 to which providers 2, 9, vendors 5.1-5.n, 6.1-6.n and 8.1-8.n, and customers 4.1-4.n and 10.1-10.n (where n is an integer to indicate a range from one to many) are connected in different ways.

Provider 2 is connected to access network 3 and the Internet 1 and providers access to the Internet 1 for customers 4.1-4.n and vendors 6.1-6.n connected to access network 3. Access network, an on-line services network such as Compuserve, American On-Line, or Prodigy, or a private Internet access network. Similarly, provider 9 is connected to access network 7 and the Internet 1 and provides access to the Internet 1 for customers 10.1-10.n and vendors 8.1-8.n. Vendors 5.1-5.n access the Internet directly by their own equipment.

In accordance with the method shown in the flow chart of FIG. 2, for example, in step 11 provider 2 establishes agreement with vendors 5.1-5.n who are connected directly to the Internet, with vendors 6.1-6.n who access the Internet

US 6,976,008 B2

5

via access network 3 and provider 2, and with vendors 8.1-8.n who are connected to the Internet 1 via access network 7 and provider 9, to bill customers 4.1-4.n for goods and services purchased by them over the Internet from vendors 5.1-5.n, 6.1-6.n and 8.1-8.n. Provider 2 also agrees to remit a portion of the collected money back to the vendors. Provider 2 also establishes an agreement with each of customers 4.1-4.n. These agreements provide that the provider will bill the customer for goods and services purchased by them over the Internet. The billing will be done to billing accounts established in connection with the agreements. The billing accounts can be, for example, credit card accounts, telephone accounts, cable television accounts, on-line services accounts, or bank accounts. The accounts need not be with the provider if the provider has a billing agreement in place with the party with whom the account was established.

As part of the services of the provider to customers 4.1-4.n, the customer is connected to the Internet 1 in step 12 at a desired time, typically by making contact via modem. Once connected to the Internet, the customer can interface with any one of vendors 5.1-5.n, 6.1-6.n and 8.1-8.n in order to find out about products or services offered by those vendors.

When one of customers 4.1-4.n makes the decision to order a product or service from one of vendors 5.1-5.n, 6.1-6.n and 8.1-8.n, in step 13 an exchange of transactional information occurs between the customer and the vendor. This exchange may include identifying information relating to the customer, such as the customer's Internet address, information relating to the products or services to be purchased, including the transaction amount, the manner and time of delivery, and a reference number to identify the order. The vendor or the customer also can produce a verification code signifying that a transaction has been completed which can be received by provider 2.

In step 14, the transactional information is obtained by provider 2. The communication can be a separate transmission by the vendor or the customer to provider 2, or provider 2 can extract the information from the vendor through equipment of provider 2. Provider 2 can then send verifying information to one or both of the customer and vendor to indicate that the transaction has been approved, if approval of a third party, such as credit card company, is required. Most importantly, the entire transaction takes place without the need of communicating the customer's credit card or other account number over the Internet 1.

The product or service is delivered to the customer in step 15 and the appropriate customer account is billed by provider 2 in step 16. Provider then remits the agreed payment in the appropriate manner to the vendor in step 17, keeping the differential as a service charge for the services rendered by provider 2. Steps 15, 16 and 17 may be performed in any order.

As can be seen from FIG. 1, the method according to the present invention can be carried out in many ways. For example, referring to FIG. 3, vendor 5.1 in step 21 can establish remitting agreements with provider 2 and provider 9 to remit to vendor 5.1 a portion of a transaction amount billed to the billing account of any one of customers 4.1-4.n and 10.1-10.n.

Similarly, each of vendors 6.1-6.n can establish a remitting agreement with provider 9 for transactions carried out over the Internet between each of vendors 6.1-6.n and customer 10.1-10.n.

A customer connects to the Internet in step 22. The customer exchanges transactional information with the ven-

6

dor in step 23 and the vendor delivers a product or services to the customer in step 25, either before or after the vendor receives remittances from the provider in step 27.

In accordance with another feature of the present invention, prior to the billing of the transaction amount to the account of the customer, and after obtaining the transactional information, the provider can obtain approval from a third party to bill the transaction amount to the billing account. This is particularly true in the case where the billing account is a credit card account or a bank account. In that instance, approval must be obtained from a third party, i.e., the bank issuing the credit card or with whom the bank account was established. Where the account is with the provider, approval would be obtained from the provider itself. In a preferred embodiment of the present invention, the approval can be obtained over the Internet and most preferably during the communication between the customer and the vendor.

In accordance with a further feature of the present invention, the customer can specify a particular billing account, for example, a credit card account, a bank account, a telephone number account, a cable television account or an on-line services account at the time that the billing agreement is established with the provider. The specification can provide that one account will be used for certain transactions, and a different account for other transactions, for example, a telephone account for transactions less than \$5.00, and a bank account for transactions of at least \$5.00. Thereafter, whenever the transaction amount is to be billed, it will be billed to that specified billing account. Alternatively, the customer can specify a plurality of billing accounts, for example, an AMEX account, a VISA account, a Mastercard account at the time that the billing agreement is established. When the transactional information is communicated, it will include an identification of which of those plurality of billing accounts the customer wants billed, without, however, specifying the account number of the account. Thus the customer can merely indicate the account by the "brand" name AMEX, VISA, Mastercard or the customer can identify it as the first account, second account or third account on a list previously established with the provider.

As noted above, the billing account is not necessarily with the provider, that is, it can be with a third party such as a bank issuing a credit card, or a bank at which the customer has a bank account. Alternatively, the provider can be a first telephone company, but the billing account can be with a second telephone company and charged by the first telephone company to the telephone number account of the customer with the second telephone company, as is customarily done in connection with conventional telecommunications services.

In accordance with the invention, the remitting can be by means of sending money or by crediting a vendor account such as a credit card merchant account, a bank account, a telephone number account, a cable television account or a on-line services account.

In a preferred embodiment of the present invention, the step of establishing the remitting account comprises specifying a particular vendor account to which the portion of the transaction amount will be remitted. The specification can provide that one account will be used for certain transactions, and a different account for other transactions, for example, a telephone account for transactions less than \$5.00, and a bank account for transactions of at least \$5.00. In an alternative embodiment of the present invention, the

US 6,976,008 B2

7

step of establishing the remitting agreement comprises the vendor specifying a plurality of vendor accounts to which a portion of the transaction account can be remitted. Thus when the transactional information is communicated, the vendor can identify which one of the plurality of vendor accounts the amount is to be remitted to without, however, specifying the specific account number.

The vendor amount can be an account with the provider or an account with the third party such as a credit card merchant account, or bank account, with a bank, or a cable television account with a cable television company.

It is understood that the embodiments described hereinabove are merely illustrative and are not intended to limit the scope of the invention. It is realized that various changes, alterations, rearrangements and modifications can be made by those skilled in the art without substantially departing from the spirit and scope of the present invention.

What is claimed is:

1. An Internet billing method for a plurality of customers and a plurality of vendors of products or services for transactions over the Internet between a purchasing customer of the plurality of customers and a selling vendor of the plurality of vendors, wherein, for each purchase transaction of a product or service between the purchasing customer and the selling vendor, a first amount is charged to the purchasing customer and a second amount is remitted to the selling vendor, the method comprising the steps by a third party to the purchase transaction of:

- a) establishing a billing agreement with the purchasing customer to permit the third party to charge the purchasing customer and to remit to a selling vendor for a purchase transaction;
 - b) establishing a remitting agreement with the selling vendor to permit the third party to charge a purchasing customer and to remit to the selling vendor for a purchase transaction;
 - c) providing a communications link through equipment of the third party between the purchasing customer and the selling vendor to permit the purchasing customer to communicate over the Internet with the selling vendor concerning the purchase transaction;
 - d) receiving authorization over the Internet from the purchasing customer to charge the first amount to the purchasing customer without previously receiving a request from the selling vendor to charge the first amount to the purchasing customer;
 - e) charging the first amount to the purchasing customer in accordance with the billing agreement; and
 - f) remitting the second amount to the selling vendor in accordance with the remitting agreement,
- wherein after establishing the billing agreement the third party does not transfer ownership of the product or service from the selling vendor to the purchasing customer.

2. The method according to claim 1, wherein no credit card account number of the purchasing customer and no bank account number of the purchasing customer is transmitted over the Internet by the third party to the selling vendor prior to the step of remitting.

3. The method according to claim 1 or 2, wherein the third party is a cable television company, a company offering financial services, an Internet access provider, or a telephone company.

4. The method according to claim 3, further comprising the step of obtaining approval for charging the first amount from a party other than the purchasing customer and the selling vendor prior to the step of charging.

8

5. The method according to claim 4, wherein the party other than the purchasing customer and the selling vendor is a bank, a company offering financial services, a credit card company, an Internet access provider, or the third party.

6. The method according to claim 3, wherein the step of charging comprises sending a bill or charging an account with a bank, a cable television company, a company offering financial services, a credit card company, an Internet access provider, a telephone company, or the third party.

7. The method according to claim 3, wherein the step of remitting comprises sending a check or crediting an account with a bank, a cable television company, a company offering financial services, a credit card company, an Internet access provider, a telephone company, or the third party.

8. The method according to claim 3, wherein the second amount is less than the first amount.

9. The method according to claim 3, wherein the step of remitting is performed before the step of charging.

10. An Internet billing method for a plurality of customers and a plurality of vendors of products or services for transactions over the Internet between a purchasing customer of the plurality of customers and a selling vendor of the plurality of vendors, wherein, for each purchase transaction of a product or service between the purchasing customer and the selling vendor, a first amount is charged to the purchasing customer and a second amount is remitted to the selling vendor, the method comprising the steps by a third party company offering financial services of:

- a) establishing a billing agreement with the purchasing customer to permit the company offering financial services to charge the purchasing customer and to remit to a selling vendor for a purchase transaction;
- b) establishing a remitting agreement with the selling vendor to permit the company offering financial services to charge a purchasing customer and to remit to the selling vendor for a purchase transaction;
- c) providing a communications link through equipment of the third party between the purchasing customer and the selling vendor to permit the purchasing customer to communicate over the Internet with the selling vendor concerning the purchase transaction;
- d) receiving authorization over the Internet from the purchasing customer to charge the first amount to the purchasing customer without previously receiving a request from the selling vendor to charge the first amount to the purchasing customer;
- e) charging the first amount to the purchasing customer in accordance with the billing agreement by charging a bank account, a credit card account, or an account with the company offering financial services; and
- f) remitting the second amount to the selling vendor in accordance with the remitting agreement without previously transmitting a credit card account number of the purchasing customer over the Internet to the selling vendor and without previously transmitting a bank account number of the purchasing customer over the Internet to the selling vendor,

wherein after establishing the billing agreement the company offering financial services does not transfer ownership of the product or service from the selling vendor to the purchasing customer.

11. The method according to any one of claims 1, 2, and 10, wherein the step of receiving is performed after the purchasing customer and the selling vendor have agreed to enter into the purchase transaction.

12. The method according to claim 3, wherein the step of receiving is performed after the purchasing customer and the selling vendor have agreed to enter into the purchase transaction.

US 6,976,008 B2

11

50. The method according to claim 18, wherein after the step of establishing a billing agreement the third party does not approve an agreement between the purchasing customer and the selling vendor to enter into the purchase transaction.

51. The method according to claim 19, wherein after the step of establishing a billing agreement the third party does not approve an agreement between the purchasing customer and the selling vendor to enter into the purchase transaction.

52. The method according to claim 20, wherein after the step of establishing a billing agreement the third party does not approve an agreement between the purchasing customer and the selling vendor to enter into the purchase transaction.

53. The method according to claim 21, wherein after the step of establishing a billing agreement the third party does not approve an agreement between the purchasing customer and the selling vendor to enter into the purchase transaction.

54. The method according to claim 22, wherein after the step of establishing a billing agreement the third party does not approve an agreement between the purchasing customer and the selling vendor to enter into the purchase transaction.

55. The method according to claim 23, wherein after the step of establishing a billing agreement the third party does not approve an agreement between the purchasing customer and the selling vendor to enter into the purchase transaction.

56. The method according to claim 24, wherein after the step of establishing a billing agreement the third party does not approve an agreement between the purchasing customer and the selling vendor to enter into the purchase transaction.

57. The method according to claim 25, wherein after the step of establishing a billing agreement the third party does not approve an agreement between the purchasing customer and the selling vendor to enter into the purchase transaction.

58. The method according to claim 26, wherein after the step of establishing a billing agreement the third party does not approve an agreement between the purchasing customer and the selling vendor to enter into the purchase transaction.

59. The method according to claim 27, wherein after the step of establishing a billing agreement the third party does not approve an agreement between the purchasing customer and the selling vendor to enter into the purchase transaction.

60. The method according to claim 28, wherein after the step of establishing a billing agreement the third party does not approve an agreement between the purchasing customer and the selling vendor to enter into the purchase transaction.

61. The method according to claim 29, wherein after the step of establishing a billing agreement the third party does not approve an agreement between the purchasing customer and the selling vendor to enter into the purchase transaction.

62. The method according to claim 30, wherein after the step of establishing a billing agreement the third party does not approve an agreement between the purchasing customer and the selling vendor to enter into the purchase transaction.

63. The method according to claim 31, wherein after the step of establishing a billing agreement the third party does not approve an agreement between the purchasing customer and the selling vendor to enter into the purchase transaction.

64. The method according to claim 32, wherein after the step of establishing a billing agreement the third party does not approve an agreement between the purchasing customer and the selling vendor to enter into the purchase transaction.

65. The method according to claim 33, wherein after the step of establishing a billing agreement the third party does not approve an agreement between the purchasing customer and the selling vendor to enter into the purchase transaction.

66. The method according to claim 34, wherein after the step of establishing a billing agreement the third party does not approve an agreement between the purchasing customer and the selling vendor to enter into the purchase transaction.

12

67. An Internet billing method for a plurality of customers and a plurality of vendors of products or services for transactions over the Internet between a purchasing customer of the plurality of customers and a selling vendor of the plurality of vendors, wherein, for each purchase transaction of a product or service between the purchasing customer and the selling vendor, a first amount is charged to the purchasing customer and a second amount is remitted to the selling vendor, the method comprising the steps by a third party to the purchase transaction of:

- a) establishing a billing agreement with the purchasing customer to permit the third party to charge the purchasing customer and to remit to a selling vendor for a purchase transaction;
- b) establishing a remitting agreement with the selling vendor to permit the third party to charge a purchasing customer and to remit to the selling vendor for a purchase transaction;
- c) providing a communications link through equipment of the third party between the purchasing customer and the selling vendor to permit the purchasing customer to communicate over the Internet with the selling vendor concerning the purchase transaction.
- d) receiving authorization over the Internet from the purchasing customer to charge the first amount to the purchasing customer without previously receiving a request from the selling vendor to charge the first amount to the purchasing customer, wherein receiving authorization is performed after the purchasing customer and the selling vendor have agreed to enter into the purchase transaction;
- e) charging the first amount to the purchasing customer in accordance with the billing agreement; and
- f) remitting the second amount to the selling vendor in accordance with the remitting agreement.

68. The method according to claim 67, wherein no credit card account number of the purchasing customer and no bank account number of the purchasing customer is transmitted over the Internet by the third party to the selling vendor prior to the step of remitting.

69. An Internet billing method for a plurality of customers and a plurality of vendors of products or services for transactions over the Internet between a purchasing customer of the plurality of customers and a selling vendor of the plurality of vendors, wherein, for each purchase transaction of a product or service between the purchasing customer and the selling vendor, a first amount is charged to the purchasing customer and a second amount is remitted to the selling vendor, the method comprising the steps by a third party to the purchase transaction of:

- a) establishing a billing agreement with the purchasing customer to permit the third party to charge the purchasing customer and to remit to a selling vendor for a purchase transaction;
- b) establishing a remitting agreement with the selling vendor to permit the third party to charge a purchasing customer and to remit to the selling vendor for a purchase transaction, wherein the remitting agreement does not require the third party to charge the purchasing customer;
- c) providing a communications link through equipment of the third party between the purchasing customer and the selling vendor to permit the purchasing customer to communicate over the Internet with the selling vendor concerning the purchase transaction;
- d) receiving authorization over the Internet from the purchasing customer to charge the first amount to the

US 6,976,008 B2

13

purchasing customer without previously receiving a request from the selling vendor to charge the first amount to the purchasing customer;

- e) charging the first amount to the purchasing customer in accordance with the billing agreement; and
- f) remitting the second amount to the selling vendor in accordance with the remitting agreement.

70. The method according to claim 69, wherein no credit card account number of the purchasing customer and no bank account number of the purchasing customer is transmitted over the Internet by to third party to the selling vendor prior to the step of remitting.

71. An Internet billing method for a plurality of customers and a plurality of vendors of products or services for transactions over the Internet between a purchasing customer of the plurality of customers and a selling vendor of the plurality of vendors, wherein, for each purchase transaction of a product or service between the purchasing customer and the selling vendor, a first amount is charged to the purchasing customer and a second amount is remitted to the selling vendor, the method comprising the steps by a third party to the purchase transaction of:

- a) establishing a billing agreement with the purchasing customer to permit the third party to charge the purchasing customer and to remit to a selling vendor for a purchase transaction;
- b) establishing a remitting agreement with the selling vendor to permit the third party to charge a purchasing customer and to remit to the selling vendor for a purchase transaction;
- c) providing a communications link through equipment of the third party between the purchasing customer and the selling vendor to permit the purchasing customer to communicate over the Internet with the selling vendor concerning the purchase transaction;
- d) receiving authorization over the Internet from the purchasing customer to charge the first amount to the purchasing customer without previously receiving a request from the selling vendor to charge the first amount to the purchasing customer;
- e) charging the first amount to the purchasing customer in accordance with the billing agreement; and
- f) remitting the second amount to the selling vendor in accordance with the remitting agreement; and

wherein after establishing the billing agreement the third party does not approve an agreement between the purchasing customer and the selling vendor to enter into the purchase transaction.

72. The method according to claim 71, wherein no credit card account number of the purchasing customer and no bank account number of the purchasing customer is transmitted over the Internet by the third party to the selling vendor prior to the step of remitting.

73. An Internet billing method for a plurality of customers and a plurality of vendors of products or services for transactions over the Internet between a purchasing customer of the plurality of customers and a selling vendor of the plurality of vendors, wherein, for each purchase transaction of a product or service between the purchasing customer and the selling vendor a first amount is charged to the purchasing customer and a second amount is remitted to the selling vendor, the method comprising the steps by a third party to the purchase transaction of:

- a) establishing a billing agreement with the purchasing customer to permit the third party to charge the pur-

14

chasing customer and to remit to a selling vendor for a purchase transaction;

- b) establishing a remitting agreement with the selling vendor to permit the third party to charge a purchasing customer and to remit to the selling vendor for a purchase transaction, wherein the remitting agreement does not require the third party to charge the purchasing customer;
- c) providing a communications link through equipment of the third party between the purchasing customer and the selling vendor to permit the purchasing customer to communicate over the Internet with the selling vendor concerning the purchase transaction;
- d) receiving authorization over the Internet from the purchasing customer to charge the first amount to the purchasing customer without previously receiving a request from the selling vendor to charge the first amount to the purchasing customer, wherein receiving authorization is performed after the purchasing customer and the selling vendor have agreed to enter into the purchase transaction;
- e) charging the first amount to the purchasing customer in accordance with the billing agreement; and
- f) remitting the second amount to the selling vendor in accordance with the remitting agreement.

74. The method according to claim 73, wherein no credit card account number of the purchasing customer and no bank account number of the purchasing customer is transmitted over the Internet by the third party to the selling vendor prior to the step of remitting.

75. An Internet billing method for a plurality of customers and a plurality of vendors of products or services for transactions over the Internet between a purchasing customer of the plurality of customers and a selling vendor of the plurality of vendors, wherein, for each purchase transaction of a product or service between the purchasing customer and the selling vendor, a first amount is charged to the purchasing customer and a second amount is remitted to the selling vendor, the method comprising the steps by a third party to the purchase transaction of:

- a) establishing a billing agreement with the purchasing customer to permit the third party to charge the purchasing customer and to remit to a selling vendor for a purchase transaction;
- b) establishing a remitting agreement with the selling vendor to permit the third party to charge a purchasing customer and to remit to the selling vendor for a purchase transaction;
- c) providing a communications link through equipment of the third party between the purchasing customer and the selling vendor to permit the purchasing customer to communicate over the Internet with the selling vendor concerning the purchase transaction;
- d) receiving authorization over the Internet from the purchasing customer to charge the first amount to the purchasing customer without previously receiving a request from the selling vendor to charge the first amount to the purchasing customer, wherein receiving authorization is performed after the purchasing customer and the selling vendor have agreed to enter into the purchase transaction;
- e) charging the first amount to the purchasing customer in accordance with the billing agreement; and
- f) remitting the second amount to the selling vendor in accordance with the remitting agreement.

US 6,976,008 B2

15

wherein after establishing the billing agreement the third party does not approve an agreement between the purchasing customer and the selling vendor to enter into the purchase transaction.

76. The method according to claim 75, wherein no credit card account number of the purchasing customer and no bank account number of the purchasing customer is transmitted over the Internet by the third party to the selling vendor prior to the step of remitting.

77. An Internet billing method for a plurality of customers and a plurality of vendors of products or services for transactions over the Internet between a purchasing customer of the plurality of customers and a selling vendor of the plurality of vendors, wherein, for each purchase transaction of a product or service between the purchasing customer and the selling vendor, a first amount is charged to the purchasing customer and a second amount is remitted to the selling vendor, the method comprising the steps by a third party to the purchase transaction of:

- a) establishing a billing agreement with the purchasing customer to permit the third party to charge the purchasing customer and to remit to a selling vendor for a purchase transaction;
- b) establishing a remitting agreement with the selling vendor to permit the third party to charge a purchasing customer and to remit to the selling vendor for a purchase transaction, wherein the remitting agreement does not require the third party to charge the purchasing customer;
- c) providing a communications link through equipment of the third party between the purchasing customer and the selling vendor to permit the purchasing customer to communicate over the Internet with the selling vendor concerning the purchase transaction;
- d) receiving authorization over the Internet from the purchasing customer to charge the first amount to the purchasing customer without previously receiving a request from the selling vendor to charge the first amount to the purchasing customer;
- e) charging the first amount to the purchasing customer in accordance with the billing agreement; and
- f) remitting the second amount to the selling vendor in accordance with the remitting agreement,

wherein after establishing the billing agreement the third party does not approve an agreement between the purchasing customer and the selling vendor to enter into the purchase transaction.

78. The method according to claim 77, wherein no credit card account number of the purchasing customer and no bank account number of the purchasing customer is transmitted over the Internet by the third party to the selling vendor prior to the step of remitting.

79. An Internet billing method for a plurality of customers and a plurality of vendors of products or services for transactions over the Internet between a purchasing customer of the plurality of customers and a selling vendor of the plurality of vendors, wherein, for each purchase transaction of a product or service between the purchasing customer and the selling vendor, a first amount is charged to the purchasing customer and a second amount is remitted, to the selling vendor, the method comprising the steps by a third party to the purchase transaction of:

- a) establishing a billing agreement with the purchasing customer to permit the third party to charge the purchasing customer and to remit to a selling vendor for a purchase transaction;

16

b) establishing a remitting agreement with the selling vendor to permit the third party to charge a purchasing customer and to remit to the selling vendor for a purchase transaction, wherein the remitting agreement does not require the third party to charge the purchasing customer;

c) providing a communications link through equipment of the third party between the purchasing customer and the selling vendor to permit the purchasing customer to communicate over the Internet with the selling vendor concerning the purchase transaction;

d) receiving authorization over the Internet from the purchasing customer to charge the first amount to the purchasing customer without previously receiving a request from the selling vendor to charge the first amount to the purchasing customer, wherein receiving authorization is performed after the purchasing customer and the selling vendor have to enter into the purchase transaction;

e) charging the first amount to the purchasing customer in accordance with the billing agreement; and

f) remitting the second amount to the selling vendor in accordance with the remitting agreement,

wherein after establishing the billing agreement the third party does not approve an agreement between the purchasing customer and the selling vendor to enter into the purchase transaction.

80. The method according to claim 79, wherein no credit card account number of the purchasing customer and no bank account number of the purchasing customer is transmitted over the Internet by the third party to the selling vendor prior to the step of remitting.

81. The method according to any one of claims 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, and 80, wherein the third party is a cable television company, a company offering financial services, an Internet access provider, or a telephone company.

82. The method according to claim 81, further comprising the step of obtaining approval for charging the first amount from a party other than the purchasing customer and the selling vendor prior to the step of charging.

83. The method according to claim 82, wherein the party other than the purchasing customer and the selling vendor is a bank, a company offering financial services, a credit card company, an Internet access provider, or the third party.

84. The method according to claim 81, wherein the step of charging comprises sending a bill or charging an account with a bank, a cable television company, a company offering financial services, a credit card company, an Internet access provider, a telephone company, or the third party.

85. The method according to claim 81, wherein the step of remitting comprises sending a check or crediting an account with a bank, a cable television company, a company offering financial services, a credit card company, an Internet access provider, a telephone company, or the third party.

86. The method according to claim 81, wherein the second amount is less than the first amount.

87. The method according to claim 81, wherein the step of remitting is performed before the step of charging.

88. An Internet billing method for a plurality of customers and a plurality of vendors of products or services for transactions over the Internet between a purchasing customer of the plurality of customers and a selling vendor of the plurality of vendors, wherein, for each purchase transaction of a product or service between the purchasing customer and the selling vendor, a first amount is charged to

US 6,976,008 B2

17

the purchasing customer and a second amount is remitted to the selling vendor, the method comprising the steps by a third party company offering financial services of:

- a) establishing a billing agreement with the purchasing customer to permit the company offering financial services to charge the purchasing customer and to remit to a selling vendor for a purchase transaction;
- b) establishing a remitting agreement with the selling vendor to permit the company offering financial services to charge a purchasing customer and to remit to the selling vendor for a purchase transaction;
- c) providing a communications link through equipment of the third party between the purchasing customer and the selling vendor to permit the purchasing customer to communicate over the Internet with the selling vendor concerning the purchase transaction;
- d) receiving authorization over the Internet from the purchasing customer to charge the first amount to the purchasing customer without previously receiving a request from the selling vendor to charge the first amount to the purchasing customer, wherein receiving authorization is performed after the purchasing customer and the selling vendor have to enter into the purchase transaction;

e) charging the first amount to the purchasing customer in accordance with the billing agreement by charging a bank account, a credit card account, or an account with the company offering financial services; and

f) remitting the second amount to the selling vendor in accordance with the remitting agreement without previously transmitting a credit card account number of the purchasing customer over the Internet to the selling vendor and without previously transmitting a bank account number of the purchasing customer over the Internet to selling vendor.

89. An Internet billing method for a plurality of customers and a plurality of vendors of products or services for transactions over the Internet between a purchasing customer of the plurality of customers and a selling vendor of the plurality of vendors, wherein, for each purchase transaction of a product or service between the purchasing customer and the selling vendor, a first amount is charged to the purchasing customer and a second amount is remitted to the selling vendor, the method comprising the steps by a third party company offering financial services of:

- a) establishing a billing agreement with the purchasing customer to permit the company offering financial services to charge the purchasing customer and to remit to a selling vendor for a purchase transaction;
- b) establishing a remitting agreement with the selling vendor to permit the company offering financial services to charge a purchasing customer and to remit to the selling vendor for a purchase transaction, wherein the remitting agreement does not require the company offering financial services to charge the purchasing customer;
- c) providing a communications link through equipment of the third party between the purchasing customer and the selling vendor to permit the purchasing customer to communicate over the Internet with the selling vendor concerning the purchase transaction;
- d) receiving authorization over the Internet from the purchasing customer to charge the first amount to the purchasing customer without previously receiving a request from the selling vendor to charge the first amount to the purchasing customer;

18

e) charging the first amount to the purchasing customer in accordance with the billing agreement by charging a bank account, a credit card account, or an account with the company offering financial services; and

f) remitting the second amount to the selling vendor in accordance with the remitting agreement without previously transmitting a credit card account number of the purchasing customer over the Internet to the selling vendor and without previously transmitting a bank account number of the purchasing customer over the Internet to the selling vendor.

90. An Internet billing method for a plurality of customers and a plurality of vendors of products or services for transactions over the Internet between a purchasing customer of the plurality of customers and a selling vendor of the plurality of vendors, wherein, for each purchase transaction of a product or service between the purchasing customer and the selling vendor, a first amount is charged to the purchasing customer and a second amount is remitted to the selling vendor, the method comprising the steps by a third party company offering financial services of:

- a) establishing a billing agreement with the purchasing customer to permit the company offering financial services to charge the purchasing customer and to remit to a selling vendor for a purchase transaction;
- b) establishing a remitting agreement with the selling vendor to permit the company offering financial services to charge a purchasing customer and to remit to the selling vendor for a purchase transaction,
- c) providing a communications link through equipment of the third party between the purchasing customer and the selling vendor to permit the purchasing customer to communicate over the Internet with the selling vendor concerning the purchase transaction;
- d) receiving authorization over the Internet from the purchasing customer to charge the first amount to the purchasing customer without previously receiving a request from the selling vendor to charge the first amount to the purchasing customer;
- e) charging the first amount to the purchasing customer in accordance with the billing agreement by charging a bank account, a credit card account, or an account with the company offering financial services; and
- f) remitting the second amount to the selling vendor in accordance with the remitting agreement without previously transmitting a credit card account number of the purchasing customer over the Internet to the selling vendor and without previously transmitting a bank account number of the purchasing customer over the Internet to the selling vendor,

wherein after establishing the billing agreement the company offering financial services does not approve an agreement between the purchasing customer and the selling vendor to enter into the purchase transaction.

91. An Internet billing method for a plurality of customers and a plurality of vendors of products or services for transactions over the Internet between a purchasing customer of the plurality of customers and a selling vendor of the plurality of vendors, wherein, for each purchase transaction of a product or service between the purchasing customer and the selling vendor, a first amount is charged to the purchasing customer and a second amount is remitted to the selling vendor, the method comprising the steps by a third party company offering financial services of:

- a) establishing a billing agreement with the purchasing customer to permit the company offering financial

US 6,976,008 B2

19

- services to charge the purchasing customer and to remit to a selling vendor for a purchase transaction;
- b) establishing a remitting agreement with the selling vendor to permit the company offering financial services to charge a purchasing customer and to remit to the selling vendor for a purchase transaction, wherein the remitting agreement does not require the company offering financial services to charge the purchasing customer;
 - c) providing a communications link through equipment of the third party between the purchasing customer and the selling vendor to permit the purchasing customer to communicate over the Internet with the selling vendor concerning the purchase transaction;
 - d) receiving authorization over the Internet from the purchasing customer to charge the first amount to the purchasing customer without previously receiving a request from the selling vendor to charge the first amount to the purchasing customer, wherein receiving authorization is performed after the purchasing customer and the selling vendor have to enter into the purchase transaction;
 - e) charging the first amount to the purchasing customer in accordance with the billing agreement by charging a bank account, a credit card account, or an account with the company offering financial services; and
 - f) remitting the second amount to the selling vendor in accordance with the remitting agreement without previously transmitting a credit card account number of the purchasing customer over the Internet to the selling vendor and without previously transmitting a bank account number of the purchasing customer over the Internet to the selling vendor.
92. An Internet billing method for a plurality of customers and a plurality of vendors of products or services for transactions over the Internet between a purchasing customer of the plurality of customers and a selling vendor of the plurality of vendors, wherein, for each purchase transaction of a product or service between the purchasing customer and the selling vendor, a first amount is charged to the purchasing customer and a second amount is remitted to the selling vendor, the method comprising the steps by a third party company offering financial services of:
- a) establishing a billing agreement with the purchasing customer to permit the company offering financial services to charge the purchasing customer and to remit to a selling vendor for a purchase transaction;
 - b) establishing a remitting agreement with the selling vendor to permit the company offering financial services to charge a purchasing customer and to remit to the selling vendor for a purchase transaction;
 - c) providing a communications link through equipment of the third party between the purchasing customer and the selling vendor to permit the purchasing customer to communicate over the Internet with the selling vendor concerning the purchase transaction;
 - d) receiving authorization over the Internet from the purchasing customer to charge the first amount to the purchasing customer without previously receiving a request from the selling vendor to charge the first amount to the purchasing customer, wherein receiving authorization is performed after the purchasing customer and the selling vendor have to enter into the purchase transaction;
 - e) charging the first amount to the purchasing customer in accordance with the billing agreement by charging a

20

- bank account, a credit card account, or an account with the company offering financial services; and
- f) remitting the second amount to the selling vendor in accordance with the remitting agreement without previously transmitting a credit card account number of the purchasing customer over the Internet to the selling vendor and without previously transmitting a bank account number of the purchasing customer over the Internet to the selling vendor,
- wherein after establishing the billing agreement the company offering financial services does not approve an agreement between the purchasing customer and the selling vendor to enter into the purchase transaction.
93. An Internet billing method for a plurality of customers and a plurality of vendors of products or services for transaction over the Internet between a purchasing customer of the plurality of customers and a selling vendor of the plurality of vendors, wherein, for each purchase transaction of a product or service between the purchasing customer and the selling vendor, a first amount is charged to the purchasing customer and a second amount is remitted to the selling vendor, the method comprising the steps by a third party company offering financial services of:
- a) establishing a billing agreement with the purchasing customer to permit the company offering financial services to charge the purchasing customer and to remit to a selling vendor for a purchase transaction;
 - b) establishing a remitting agreement with the selling vendor to permit the company offering financial services to charge a purchasing customer and to remit to the selling vendor for a purchase transaction, wherein the remitting agreement does not require the company offering financial services to charge the purchasing customer;
 - c) providing a communications link through equipment of the third party between the purchasing customer and the selling vendor to permit the purchasing customer to communicate over the Internet with the selling vendor concerning the purchase transaction;
 - d) receiving authorization over the Internet from the purchasing customer to charge the first amount to the purchasing customer without previously receiving a request from the selling vendor to charge the first amount to the purchasing customer;
 - e) charging the first amount to the purchasing customer in accordance with the billing agreement by charging a bank account, a credit card account, or an account with the company offering financial services; and
 - f) remitting the second amount to the selling vendor in accordance with the remitting agreement without previously transmitting a credit card account number of the purchasing customer over the Internet to the selling vendor and without previously transmitting a bank account number of the purchasing customer over the Internet to the selling vendor,
- wherein after establishing the billing agreement the company offering financial services does not approve an agreement between the purchasing customer and the selling vendor to enter into the purchase transaction.
94. An Internet billing method for a plurality of customers and a plurality of vendors of products or services for transactions over the Internet between a purchasing customer of the plurality of customers and a selling vendor of the plurality of vendors, wherein, for each purchase transaction of a product or service between the purchasing customer and the selling vendor, a first amount is charged to

US 6,976,008 B2

21

the purchasing customer and a second amount is remitted to the selling vendor, the method comprising the steps by a third party company offering financial services of:

- a) establishing a billing agreement with the purchasing customer to permit the company offering financial services to charge the purchasing customer and to remit to a selling vendor for a purchase transaction; 5
- b) establishing a remitting agreement with the selling vendor to permit the company offering financial services to charge a purchasing customer and to remit to the selling vendor for a purchase transaction; wherein the remitting agreement does not require the company offering financial services to charge the purchasing customer; 10
- c) providing a communications link through equipment of the third party between the purchasing customer and the selling vendor to permit the purchasing customer to communicate over the Internet with the selling vendor concerning the purchase transaction; 15
- d) receiving authorization over the Internet from the purchasing customer to charge the first amount to the purchasing customer without previously receiving a 20

22

request from the selling vendor to charge the first amount to the purchasing customer, wherein receiving authorization is performed after the purchasing customer and the selling vendor have to enter into the purchase transaction;

- e) charging the first amount to the purchasing customer in accordance with the billing agreement by charging a bank account, a credit card account, or an account with the company offering financial services; and
 - f) remitting the second amount to the selling vendor in accordance with the remitting agreement without previously transmitting a credit card account number of the purchasing customer over the Internet to the selling vendor and without previously transmitting a bank account number of the purchasing customer over the Internet to the selling vendor,
- wherein after establishing the billing agreement the company offering financial services does not approve an agreement between the purchasing customer and the selling vendor to enter into the purchase transaction.

* * * * *

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,976,008 B2
 APPLICATION NO. : 09/975839
 DATED : December 13, 2005
 INVENTOR(S) : Egendorf

Page 1 of 9

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Title page showing an illustrative figure, should be deleted and substitute the attached title page.

Title page.

Item [56], References Cited, U.S. PATENT DOCUMENTS, add the following:

-- 3,652,795	3/1972	Wolf et al.	379/91.01
5,146,491	9/1992	Silver et al.	379/114.24
5,283,731	2/1994	Lalonde et al.	705/1
5,446,489	8/1995	Egendorf	725/1
5,590,197	12/1996	Chen et al.	705/65
5,724,424	3/1998	Gifford	705/79
5,727,163	3/1998	Bezos	705/27
5,819,092	10/1998	Ferguson et al.	717/1
5,826,241	10/1998	Stein et al.	705/26 --.

FOREIGN PATENT DOCUMENTS, add the following:

-- 97/41586	11/6/97	WO
05-014510	1/22/93	Japan
06-291889	10/18/94	Japan
07-056888	3/3/95	Japan --.

OTHER PUBLICATIONS, add the following:

-- Paul, Nora. "Database and Bulletin Board Services: A Guide to On-Line Resources". The Quill, vol. 81, no. 7, p. 18, September, 1993.

Bremner, Joseph. "Guide to Database Distribution: Legal Aspects and Model Contracts, Second Edition". National Federation of Abstracting and Information Services, chapters 3, 4, and 6. 1994.

"New Line for SBA". Family and Home Office Computing, vol. 12, no. 4, p. 19. April, 1994.

Blankenhorn, Dana. "Virtual Mall Opens in Cyberspace. Newsbytes. June 20, 1994.

Goradia et al. "NetBill 1994 Prototype". Carnegie Mellon University Information Networking Institute. August, 1994.

Meece, Mickey. "Start-Up Offers Payment System for Data Bought Over Internet". American Banker, vol. 159, no. 203, p. 1. Oct. 20, 1994.

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,976,008 B2
APPLICATION NO. : 09/975839
DATED : December 13, 2005
INVENTOR(S) : Egendorf

Page 2 of 9

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Title page (cont'd).

Rodriguez, Karen. "Cyberspace Start-Ups Offer Internet Wares". InfoWorld, vol. 16, no. 43, p. 8. Oct. 24, 1994.

"First Virtual Bank of Cyberspace". Newsbytes News Network. October 28, 1994.

Press, Larry. "Commercialization of the Internet". Communications of the ACM, vol. 37, no. 10, p. 17. November, 1994.

Wieggers, Alex. "First Virtual Really Pays Bills". Business Journal, vol. 12, no. 40, p. 1. December 26, 1994.

Cummings, Joanne, and Knight, Fred. "Internet Service Providers to Ride a Familiar Roller Coaster". Business Communications Review, vol. 25, no. 1, p. 67. January, 1995.

Day, Jacqueline. "Industry Players in Hot Pursuit of Secure Internet Transaction Mode". Bank Systems & Technology, vol. 32, no. 1. January, 1995.

Into the Cyberspace". Credit Card Management, vol. 7, no. 11, p. 34. February, 1995.

Blankenhorn, Dana. "Building the Tools for Web Commerce". Interactive Age, vol. 2, no. 8, p. 34. February 13, 1995.

Knowles, Anne. "Improved Internet Security Enabling On-Line Commerce (new services based on Secure Hypertext Transfer Protocol, Secure Sockets Layer Standards)". PC Week, vol. 12, no. 11, p. 1. March 20, 1995.

Marrinan, Michele. "First Union, Open Market Hit the Internet". Bank Systems + Technology, vol. 32, no. 5, p. 6. May, 1995.

Singleton, Andrew. "Cash on the Wirehead: You Can't Do Business on the Internet If You Can't Pay Your Bills or Get Paid. Here's How". Byte, vol. 20, no. 6, p. 71. June, 1995.

Bowers, Richard. "First Virtual Offers Unique Internet Payment System". Newsbytes News Network, p. 1. June 23, 1995.

Bowers, Richard. "First Virtual Creates Corporation of Future". Newsbytes News Network, p. 1. June 28, 1995. --.

Column 1.

Line 31, "nave" should read -- have --.

Column 2.

Line 12, "exxisting" should read -- existing --.

Lines 29 and 37, "vender," should read -- vendor, --.

Lines 50-51, "offer customers" should read -- offer their customers --.

Line 56, "chance" should read -- change --.

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,976,008 B2
APPLICATION NO. : 09/975839
DATED : December 13, 2005
INVENTOR(S) : Egendorf

Page 3 of 9

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 3.

Line 29, "agrees to the" should read -- agrees to do the --.
Line 35, "vender's" should read -- vendor's --.
Line 53, "or example," should read -- for example, --.
Line 54, "or o a" should read -- or to a --.
Line 63, "provider, to the" should read -- provider, not the --.

Column 4.

Line 6, "make" should read -- made --.
Line 55, "providers" should read -- provides --.
Line 57, "Access network, an" should read -- Access network 3 can be a telephone network, a cable television network, an --.
Line 58, "Prodigy, r a" should read -- Prodigy, or a --.
Line 66, "agreement" should read -- agreements --.

Column 5.

Line 25, "form" should read -- from --.
Line 40, "from the vendor" should read -- from the exchange of information taking place between the customer and the vendor --.
Line 50, "Provider then" should read -- Provider 2 then --.
Line 61, "4.1-4.nand" should read -- 4.1-4.n and --.
Line 65, "customer" should read -- customers --.
Line 66, "is" should read -- in --.

Column 6.

Line 1, "services" should read -- service --.
Lines 7 and 14, "form" should read -- from --.
Line 26, "sued" should read -- used --.
Line 39, "VISA, Mastercard" should read -- VISA or Mastercard --.
Line 44, "is, t can" should read -- is, it can --.
Line 57, "or a" should read -- or an --.
Line 63, "For" should read -- for --.

Column 7.

Line 8, "amount" should read -- account --.
Line 9, "with the third" should read -- with a third --.
Line 62, "on Internet" should read -- an Internet --.

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,976,008 B2
APPLICATION NO. : 09/975839
DATED : December 13, 2005
INVENTOR(S) : Egendorf

Page 4 of 9

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 8.

Line 8, "company an" should read -- company, an --.

Line 61, "preformed" should read -- performed --.

Column 9.

Line 3, "arced" should read -- agreed --.

Line 34, "patty" should read -- party --.

Column 12.

Line 23, "transaction." should read -- transaction; --.

Column 13.

Line 11, "by to" should read -- by the --.

Line 22, "patty" should read -- party --.

Line 45, "agreement; and" should read -- agreement, --.

Line 61, "vendor a" should read -- vendor, a --.

Column 14.

Line 67, "agreement." should read -- agreement, --.

Column 15.

Line 61, "remitted, to" should read -- remitted to --.

Column 16.

Line 18, "have to" should read -- have agreed to --.

Line 44, "tan" should read -- than --.

Column 17.

Line 23, "have to" should read -- have agreed to --.

Line 35, "to selling" should read -- to the selling --.

Column 18.

Line 29, "transaction," should read -- transaction; --.

Column 19.

Line 21, "have to" should read -- have agreed to --.

Line 64, "have to" should read -- have agreed to --.

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,976,008 B2
APPLICATION NO. : 09/975839
DATED : December 13, 2005
INVENTOR(S) : Egendorf

Page 5 of 9

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 20.

Line 10, "alter" should read -- after --.
Line 16, "transaction over" should read -- transactions over --.
Line 57, "alter" should read -- after --.

Column 21.

Line 11, "transaction;" should read -- transaction, --.

Column 22.

Line 4, "have to" should read -- have agreed to --.
Line 17, "alter" should read -- after --.

This certificate supersedes Certificate of Correction issued May 9, 2006.

Signed and Sealed this

Thirteenth Day of February, 2007

A handwritten signature in black ink, appearing to read "Jon W. Dudas". The signature is stylized with a large, looped initial "J" and a distinct "D".

JON W. DUDAS
Director of the United States Patent and Trademark Office

(12) **United States Patent**
Egendorf(10) Patent No.: **US 6,976,008 B2**
(45) Date of Patent: ***Dec. 13, 2005**(54) **INTERNET BILLING METHOD**(75) Inventor: **Andrew Egendorf, Lincoln, MA (US)**(73) Assignee: **Netcraft, Corporation, Lincoln, MA (US)**

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 290 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **09/975,839**(22) Filed: **Oct. 11, 2001**(65) **Prior Publication Data**

US 2002/0032654 A1 Mar. 14, 2002

Related U.S. Application Data

(63) Continuation of application No. 09/568,925, filed on May 11, 2000, which is a continuation of application No. 09/057,230, filed on Apr. 8, 1998, now Pat. No. 6,188,994, which is a continuation of application No. 08/499,535, filed on Jul. 7, 1995, now Pat. No. 5,794,221.

(51) Int. Cl.⁷ **G06F 17/60**(52) U.S. Cl. **705/40; 705/41; 705/42**(58) Field of Search **705/40, 41, 42**(56) **References Cited****U.S. PATENT DOCUMENTS**3,573,747 A * 4/1971 Adams 340/172.5
5,146,491 A * 9/1992 Silver et al. 379/114
5,329,589 A * 7/1994 Fraser et al. 379/91.025,394,324 A * 2/1995 Clearwater 705/8
5,446,489 A * 8/1995 Egendorf 348/3
5,737,414 A * 4/1998 Walker et al. 380/4
5,845,265 A * 12/1998 Woolston 705/37**OTHER PUBLICATIONS**

Carnegie Mellon University, "Internet billing Server Prototype Scope Document INI Technical Report 1993-1" (Oct. 14, 1993).*

* cited by examiner

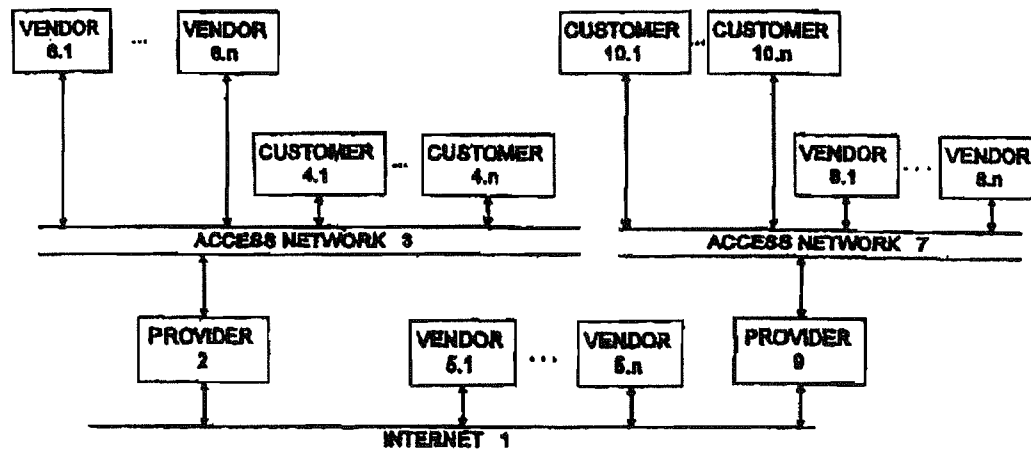
Primary Examiner—V. Millin

Assistant Examiner—Daniel S. Pelton

(74) Attorney, Agent, or Firm—Hogan & Hartson L.L.P.

(57) **ABSTRACT**

An Internet billing method comprises establishing an agreement between an Internet access provider and a customer, and an agreement between the Internet access provider and a vendor, wherein the Internet access provider agrees with the customer and the vendor to bill the customer and remit to the vendor for products and services purchased over the Internet by the customer from the vendor. The provider creates access to the Internet for the customer. When the customer orders a product or service over the Internet from a vendor, transactional information transmitted between the customer and the vendor is also transmitted to the provider. The provider then bills the transaction amount to the customer and remits a portion of the transaction amount to the vendor, keeping the differential as a fee for providing the service. As a result of this method, there is no need for any customer account numbers or vendor account numbers to be transmitted over the Internet, thereby maintaining the security of that information.

94 Claims, 3 Drawing Sheets

U.S. Patent

Dec. 13, 2005

Sheet 1 of 3

6,976,008 B2

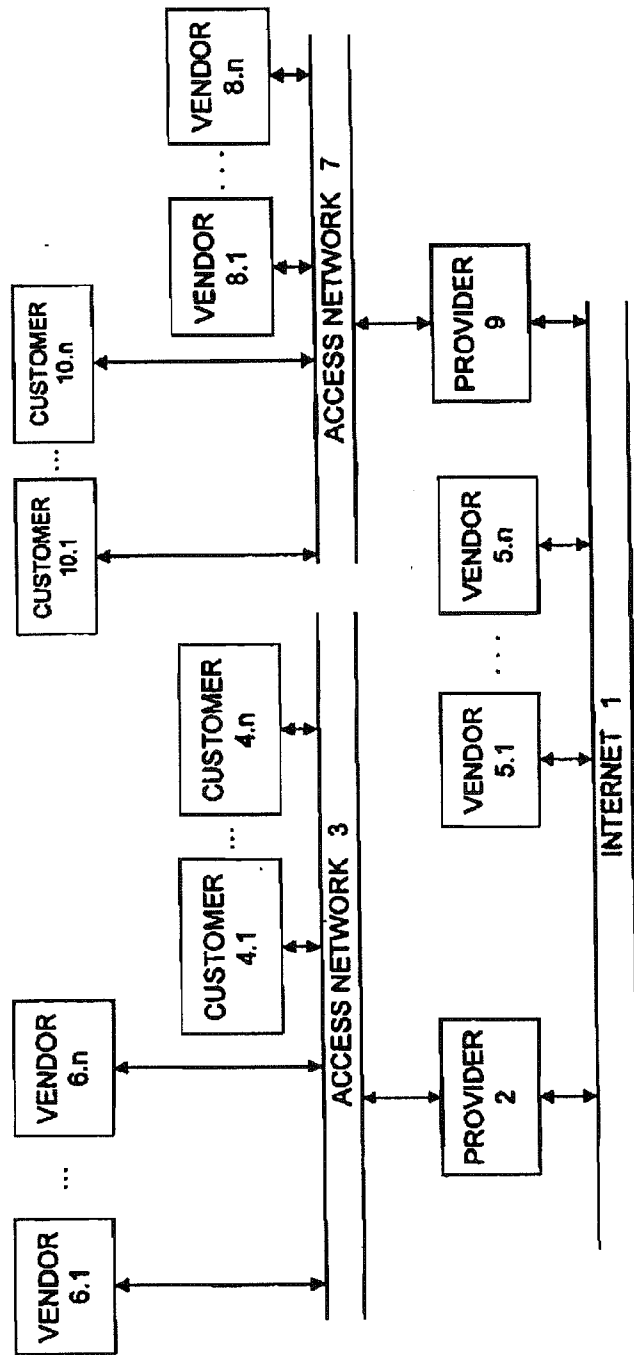


FIG. 1

U.S. Patent

Dec. 13, 2005

Sheet 2 of 3

6,976,008 B2

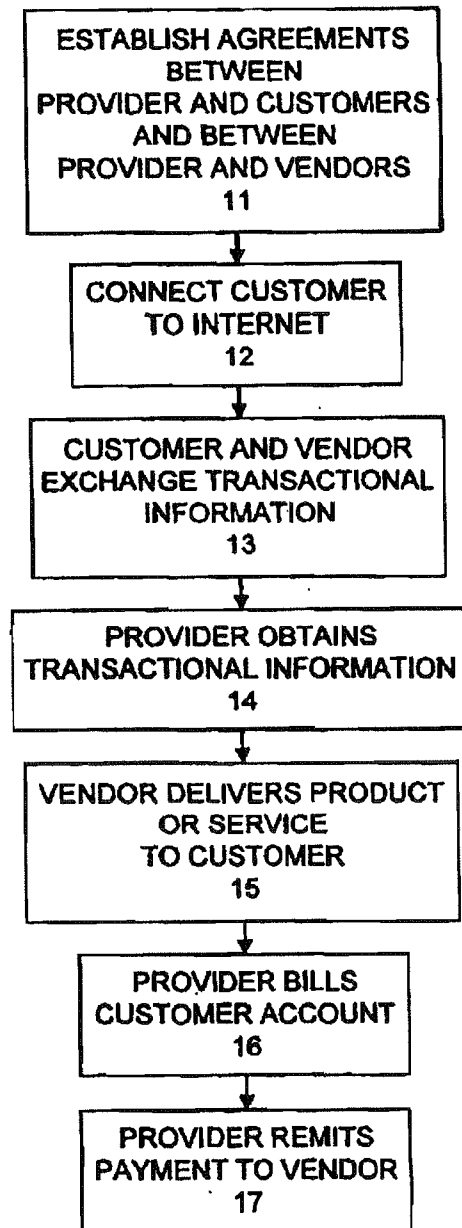


FIG. 2

U.S. Patent

Dec. 13, 2005

Sheet 3 of 3

6,976,008 B2

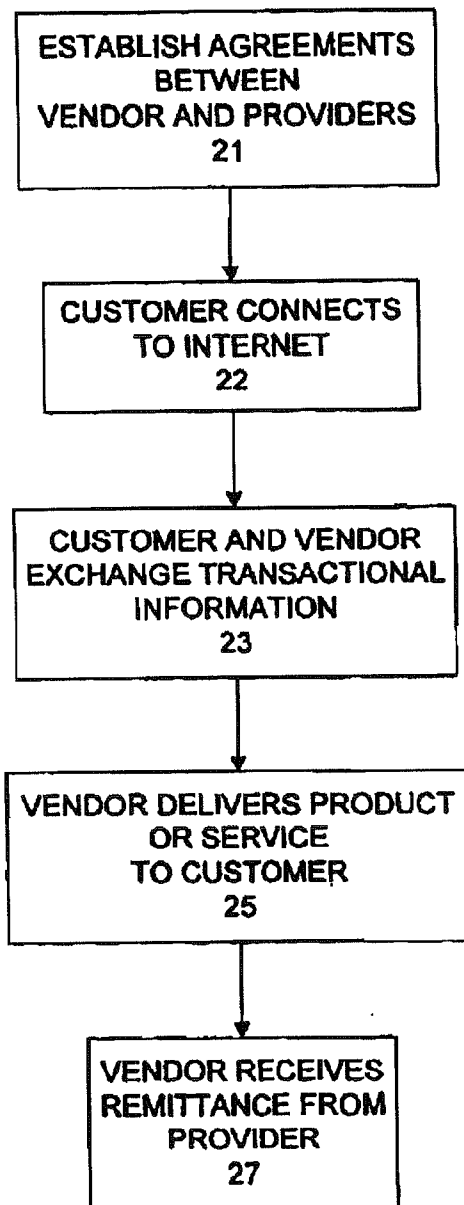


FIG. 3